This journal is devoted to the needs and interests of the school and college music teachers of Missouri and the United States. Articles in Volume 3, Number 1 are: "The Parker Road Project: An Experiment of the Effects of Young Audience Concerts and a Related Curriculum on the Cognitive and Affective Development of Elementary School Children" (J. Milak); "The Cumulative Attainment by Missouri High School Seniors of the Musical Learnings Stated in the Music Curriculum Guides Published by the Missouri State Department of Education" (D. L. Oakley); "The Structural Organization of the Subject Matter of Music for Elementary and Junior High Curricula" (M. T. Hagan); "A Study of Musical Achievement of Children in an Economically Depressed Area" (W. Lathrom); "The Derivation and Early History of the Saxophone" (R. A. Amendur); "Sir Carl Busch: His Life and Work as a Teacher, Conductor, and Composer" (D. Lowe); and "Dissertation Abstracts" (n=7). Articles in Volume 3, Number 2 are: "A Century and a Half of Missouri Music" (J. L. Ralston); "Orthodontic Treatment as a Factor in the Selection and Performance of Brass Musical Instruments" (N. Bjorstrom); "The Significance of the Wind Ensemble in American Music Education" (D. Gephardt); "Inter-Subject Involvement" (M. F. Hunt); "The Twentieth Century: A Secondary Teacher's Guide for the Introduction of Twentieth Century Music with Emphasis Upon American Composers" (D. L. Turpin); "Music and Media" (M. O. Johnson); and "Dissertation Abstracts" (n=7). Articles in Volume 3, Number 3 are: "Verbal-Descriptive and Performance Responses of Kindergarten Children to Selected Musical Stimuli and Terminology" (N. van Zee); "Personalized Instruction: Some Reasons Why" (T. Hagan); "Learning Centers in Elementary School Music" (M. Lackey); "A Comparison of Two Methods for Teaching Musical Form to Seventh Grade General Music Classes" (J. W. Burton); "Instruction in the Music Conservatories of St. Louis, 1870-1930" (E. Headley); "Contemporary Concepts of Career Education in Music and Their Relationship to John Dewey" (M. S. Milak); "Black Music: Pathmaker of the Harlem Renaissance" (M. Blum).
and "Dissertation Abstracts" (n=4). Articles in Volume 3, Number 4 are: "Humanism and the Whole Note" (G. H. Rosenberg); "Music in Open Education: Its Relationship to Individualization through the Use of Learning Centers with Emphasis on Elementary Education" (K. D. Rollins); "A Study of Placement, Proficiency and Competency Evaluation of Student Achievement in Music History and Music Theory in Missouri Institutions of Higher Education" (A. LeBlanc; H. LeBlanc); "A Matrix for Instrumental Competencies" (J. A. Middleton); "Research in Music Education for Young Children" (M. P. Zimmerman); "General Music: A Music Educator's Proving Ground" (C. D. Duncan); "The Degradation of the Blues" (K. Wexler), and "Dissertation Abstracts" (n=14). Articles in Volume 3, Number 5 are: "The Influence of Gestalt Psychology on Elementary Music Education and Pedagogy: Proposals for a Curriculum (K-6)" (R. Boyer); "The Esthetic Theories of John Dewey and Their Effect on Music Education Practices of Today" (R. C. Ceraghino); "Characteristics of the Adolescent: Implications for the Listening Repertoire" (M. P. Zimmerman); "A Brief Historical Study of the Singing Schools and Shape Notes and Implications for Music Education Today" (F. Willman); and "Selected Abstracts in Music Education" (n=9). (BT)

Lewis B. Hilton, Editor

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SUGGESTIONS TO AUTHORS

Contributions to this journal should be sent to Alfred W. Bleckschmidt, Director, Fine Arts Education, State Department of Education or Lewis B. Hilton, Editor, Washington University, St. Louis. Authors should observe the following rules in preparing their manuscripts: The editors welcome contributions of a philosophical, historical or scientific nature which report the results of research pertinent in any way to instruction in music as carried on in the educational institutions of Missouri. Articles should be typewritten, with double spacing throughout, including footnotes, long quotations, and itemized lists. Footnotes should be placed consecutively at the end of the article, beginning on a new page, using triple spacing between notes. Authors reporting quantitative studies may substitute a list of references for footnotes in accordance with practice followed in many scientific journals. In all instances, manuscript style should follow recommendations made in the MLA Style Sheet. The Chicago Manual of Style should be followed in setting up tables, charts and figures, which should be numbered and placed on separate pages.

N.B. All contributors are advised to keep a copy of any manuscript submitted. The Editorial Committee cannot be responsible for loss of manuscripts.
THE PARKER ROAD PROJECT: AN EXPERIMENT ON THE EFFECTS OF YOUNG AUDIENCE CONCERTS AND A RELATED CURRICULUM ON THE COGNITIVE AND AFFECTIVE DEVELOPMENT OF ELEMENTARY SCHOOL CHILDREN

John Milak
Washington University, St. Louis

PURPOSE
Young Audience Chapters have become well established in many areas of the country. These groups provide an important community function by providing high quality musical performances by small ensemble groups of professional musicians for schools. To gain more information concerning the effects of these concerts on the children who are exposed to them, the St. Louis Chapter of Young Audience, with the financial support of the Missouri State Council on the Arts and the Ferguson-Florissant School District, proposed a systematic study to elicit information regarding the effectiveness, both cognitively and affectively, of Young Audience Concerts and a special curriculum designed in coordination with these concerts. The scope of this project was to determine the effects of the concerts and the special curriculum on the sixth grade students of the Parker Road School, an elementary school in the Ferguson-Florissant District. Information gained from this study would be used in planning future Young Audience Concerts and a supporting curriculum.

PROJECT DESIGN
A curriculum based on the dimensions of music was written by Sister Tobias Hagan (See Appendix A.) It consists of a twelve-week program with two meetings each week and was designed to coordinate with six Young Audience Concerts. (See Appendix B.) The format of this curriculum is flexible and it could easily be modified for use with other types of Young Audience Concert programs.

Under the direction of Dr. Wynne Harrell, music supervisor of the Ferguson-Florissant School District, four sixth grade classes of about thirty students each were selected from the Parker Road School for the purpose of this project which was done during the spring semester of the 1971-1972 school year. The principal of the school reported that the classes were randomly assigned at the beginning of the school year so the groups were considered randomized in respect to all variables. All four classes were instructed by Elizabeth Hutcherson, the regular music teacher, who was thoroughly prepared to teach the special curriculum. In order that the effects of the concerts and the special curriculum could be separated for purposes of analysis, the classes were given the following combinations of variables:

Class A — Treatment and Concerts. This group was taught the special curriculum and heard six Young Audience Concerts during the twelve weeks.
Class B — Concerts Only. This group received the traditional music instruction of the school rather than the treatment of the special curriculum. They heard the six Young Audience Concerts, but not in the same audience with Class A.

(The reason for having Classes A and B in separate audiences is that the inductive approach used by Young Audience musicians creates a situation in which the students can, in a sense, teach each other. Therefore, comments by students in Class A could prejudice the test results of students in Class B, particularly if Class A students were significantly influenced by their special curriculum. Both audiences included additional students.)

Class C — Treatment Only. The third group was given the special treatment of the curriculum given Class A, but did not hear the Young Audience Concerts. Only recordings were used for listening experiences.

Class D — No special treatment or concerts. This group was taught only the traditional music instruction of their school district.

TEST PROCEDURES

The four classes were given identical pre and post tests which had been designed to measure the cognitive change; i.e., the subject matter learning which occurred as a result of the various treatments and the affective change; i.e., the change in the students' attitude towards music which occurred during the course of the study.

The tests designed to measure cognitive changes (See Appendix C.) were as follows:

1. Experimental Curriculum Test (15 points)

These questions were derived from the special curriculum and were used to measure the effectiveness of this curriculum.

2. Regular Curriculum Test (15 points)

These questions were derived from the regular school music curriculum and were used to measure the effectiveness of this curriculum.

3. General Knowledge Test (15 points)

These questions were derived from areas of overlap between the special and regular curriculums and from material taught in previous courses.

4. Music Achievement Test (15 points)

These questions are part of the Richard Colwell "Music Achievement Test" and are designed to measure the ability to recognize and identify the sound of instruments both in solo and orchestral context.

5. Instrumental Recognition Test (20 points)

The students were shown pictures of musical instruments and asked to write down their correct names. The purpose of this test was to measure the students' ability to visually recognize and recall the names of the instruments.

The first three tests were based upon the curriculums used in this study and were combined into one test in the final format. The music teacher did not know the questions on these tests to prevent any type of teaching prejudice. In general, all five parts of the tests together involved about 50% recall answers and 50% recognition answers.

The tests designed to measure affectual change (See Appendix D.) were as follows:

1. General Music Attitude (18 statements)

This test consisted of an attitude rating scale which determined each student's amount of agreement or disagreement for both positive and negative attitudes towards music.

2. Attitude Towards Performing Groups (5 statements)

This test consisted of an attitude rating scale which determined each student's like or dislike for the groups which performed in the Young Audience Concerts.

3. Instrument Preferences (20 instruments)

This test consisted of an attitude rating scale which determined each student's like or dislike for certain musical instruments. These instruments were further defined as those which the students thought were used in "classical" music or "popular" music or in both types of music.

The General Music Attitude Test was designed by carefully selecting those attitudes which were considered as positive attitudes towards music and those which were considered as negative attitudes towards music. For example, the statement, "I wish I could hear more classical music," was considered a positive attitude whereas the statement "Listening to any music is a waste of time," was considered a negative attitude. The statements were phrased so that many of the negative attitudes appeared
to be stated in a positive manner. This was done to prevent the students from giving biased answers. The grading scale which was used to evaluate the answers was a +3 through -3 scale with an inferred 0 point. If a student agreed very much (MA) with a positive attitude statement, then his answer was scored with a +3; if a student agreed very much (MA) with a negative attitude statement, then his answer was scored with a -3. A student who did not wish to rate the statement or did not understand its meaning, was given a score of 0. The final analysis composed the differences in these numerical scores on each statement between the pre and post tests.

The Attitude Towards Performing Groups Test was included in the last part of the General Music Attitude Test and consisted of statements about each of the performing groups. The same grading technique used in the previous test was used to evaluate the answers on this test.

The Instrument Preference Test used the same type of grading scale but on a like-to-dislike continuum. The purpose of this test was to obtain a measure of how student’s preferences for various types of instruments changed during the course of the different treatments. In order to interpret the results of this test, the students were asked to classify each instrument into three general categories; popular, classical, and both. If the student thought that the instrument was used only in popular music, (which includes folk, rock, and musicals) then he would classify the instrument as a “popular” instrument. If the student thought that the instrument was used only in classical music, (general definition intended) then he classified the instrument as a “classical” instrument. If the student thought that the instrument was used in both types of music then he classified the instrument as a “both” instrument. These classifications made by each student were tallied and the instruments were grouped in these corresponding categories.

The first form of the attitude tests included statements about subjects other than music. The reason for this format was to make the students unaware of the purpose of this test to prevent prejudice. The final question on the first part of this form was a question about the nature of the test. Only two out of one hundred thirty-one students who took the pre-test reported that they thought the statements were about music. However, because of the nature of some of the questions with reference to politics and current events, some of the parents of the students expressed great concern about the test, and it was decided that the more controversial subjects be omitted from the final version of the test. Unfortunately, the students were aware of the nature of the test at the time of the post-test. This awareness may have caused a prejudice which affected the results of the attitude tests.

TEST RESULTS -- COGNITIVE TESTS

Figures 1 through 5 show the average in raw scores for the cognitive tests. Using the t-test significance, it was found that no significant difference (.05 level) existed between the means of the pre-test scores. This information reinforces the original assumption that the groups were randomized, at least in terms of their musical achievement.

The total difference between the pre- and post-test means are as follows:

Class A = 13.15  D = 2.00 at .01*  
Class B = 8.44  
Class C = 12.94  
Class D = 6.00

*This is an algebraic solution of the t-test of significance formula. D equals the least amount of difference between the means which is necessary to exceed the .01 level of confidence. Differences equal to or greater than this amount can be considered statistically significant.

The following statements can be made about the cognitive tests in general.

1. A significant difference in the amount of learning as defined by the cognitive tests, did occur between the groups.

2. The classes which received the special curriculum significantly out-performed those classes which received the regular curriculum.

3. The classes which received the concerts significantly out-performed the classes which did not hear the concerts but as greatly as those classes which received the curriculum.

4. The class which received the special curriculum and the concerts slightly out-performed (not significantly) all other classes.

Figures 6 through 10 show the classes grouped with respect to the concert and the curriculum variables. The average of Classes A + B as compared with the average of Classes C + D gives results with respect to the concert variable and the average of Classes A + C as compared with the average of Classes B + D gives results with respect to the curriculum variable. Each chart also contains the algebraic solution of the t-test of significance for its .01 level of confidence. Differences which equal or exceed this amount are significant at the .01 level. Those comparisons that are significant are marked with an asterisk.

The following statements can be made about the specific cognitive tests.

1. The difference of means with respect to the curriculum variable for the experimental curriculum was significant.

2. The difference of means with respect to the curriculum variable for the general knowledge test was significant.

3. The difference of means with respect to the curriculum variable for the instrumental recognition test was significant.
INTERPRETATION — COGNITIVE TESTS

Although the analysis of the total difference of the means produced significant results for both the concerts and curriculum, individual analysis by test shows that the special curriculum had a much greater effect on the amount of learning which occurred during the treatments. As these tests were designed around the two curriculums and not the concerts, it is possible that the tests were not sensitive to any learning which occurred during the concerts. It is interesting to note two more things about the results.

1. The classes which received the regular curriculum did not outperform those classes which received the special curriculum on the regular curriculum test.

2. The scores on the music achievement test, which involved recognizing the sound of instruments, were higher for the classes which received the concerts, however, this difference was not significant.

In summary, the Young Audience Concerts and the special curriculum did have a significant affect on the cognitive development of the sixth grade students of the Parker Road School. The curriculum affected the amount of learning to a greater degree than the concerts. The best results were obtained by the class which received the curriculum and the concerts but these results did not differ significantly from the class which received only the curriculum.

TEST RESULTS — AFFECTIVE TESTS

Figures 11 through 14 are the test results for the attitude tests with respect to the average number of students who gained attitude points for each question and the average number of attitude points gained or lost for each question. Bars which extend to the left indicate negative gains and bars which extend to the right indicate positive gains. Figures 13 and 14 are the results of the instrumental preference test with respect to overall scores, and with respect to sub-scores on each of the instrument classifications mentioned above. The total difference between the pre- and post-test means with respect to average gain for each question are as follows:

Class A = +16.35
Class B = -13.1
Class C = -12.4
Class D = -14.5

D = 4.00 at .01

*See note above under cognitive scores.

The following statements can be made about the attitude tests in general.

1. The class which received the special curriculum and the concerts was the only class that had an overall improvement in attitude.

2. The difference between the means of Class A as compared to the other classes is significant.

INTERPRETATION — ATTITUDE TESTS

The results of the general music attitude test (Figure 11) showed that all the classes had negative average gains. These negative gains were equally distributed for both the positive and negative attitude statements. In other words, the students did not only agree less with "positive" attitude statements but also agreed more with the "negative" attitude statements.

Classes A and C had the least amount of negative gains and the highest amount of students who showed a positive gain. Further analysis showed that the curriculum had a significant effect on this test.

The results of the Attitude Towards Performing Groups test showed that Classes A and B, those which received the concerts, were the only classes which had a positive gain in attitude points. These classes also had the higher number of students which moved in a positive direction. Further analysis showed that the classes which received the concerts significantly improved their attitude towards the performing groups over those classes which did not receive the concerts.

The result of the Instrumental Preference test showed that Class A, the class which received the special curriculum and the concerts, showed a large positive gain in attitude toward instrument preference; all the other classes had negative gains. Class A also had the largest amount of positive gain in "classical" instruments, and the largest amount of students who improved for each question. Further analysis indicated that Class A significantly improved its attitude toward musical instruments over all the other classes. The only treatment to have an effect on this test was the concerts in combination with the special curriculum.

In summary, the Young Audience Concerts and the special curriculum did have an affect on the affective development of the sixth grade students at the Parker Road School. However, this effect was in certain areas negative in nature. Several possible assumptions are forwarded as reason for these results.

1. The conditions under which the post-test was given were different than the pre-test. This is explained earlier in the paper.

2. The students' attitudes may have been measured too closely to the treatments. The students were saturated with six concerts in a short period of time. It may take some time before the effects of these concerts have influenced the students' attitudes.

3. Since it is very difficult to measure attitudes, the tests may not have been sensitive to the affectual changes that it was designed to measure.
Whatever the reasons for these results, the meaning of the significance between the groups becomes less powerful. The only class that produced any significant attitude change in a positive direction was the class that received the special curriculum in combination with the concerts; however, even this class had a negative gain on one of the tests.

One assumption for the reasons the attitude tests indicated negative gains was that the post-test was administered too soon after the treatments ended. To test this assumption the affective tests were administered again to the same students in the following fall semester of the 1972-1973 school year. The results of this test were as follows:

1. No significant changes occurred in any of the class averages for all of the three tests.

2. None of the negative gains were reversed, and none were increased significantly.

3. The number of students who had positive gains slightly varied, but not significantly.

4. The students who had positive gains increased these gains an average of 1.5 points for each statement.

5. The students who had negative gains increased these gains an average of 1.4 points for each statement.

These results indicate that the only change noted in the attitude of the students which occurred during the six-month interval between the post-test and the retest was that the students who had a positive gain increased their gain and the students who had a negative gain increased their gain. An analysis of individual statements indicated that there was no significant changes between the distribution of negative gains for both the positive and negative attitude statements. The results did not indicate a statistical regression of any sort.

SUMMARY

Meaningful information was obtained about the effects of the Young Audience Concerts and the special curriculum. The results indicated that the class which received the concerts in combination with the curriculum achieved the higher overall test scores, especially on the attitude tests. The class which received the special curriculum only slightly out-performed the class which received the concerts. The class which received only the regular curriculum scored the lowest on the tests. From this information it is possible to deduce that the Young Audience Concerts had more impact on the students when they were combined with a related curriculum.

The results also indicated a need for further investigation in the areas of attitude development. Because this project was done in only one school and the curriculums were taught by only one teacher, it is not valid to generalize these findings to a larger population. However, the designs and tests used in this project could serve as a model for more detailed and larger investigation in this area.
General Music Attitude

Class A
-1.2 = 8.0

Class B
-12.7 = 5.9

Class C
-3.6 = 8.2

Class D
-5.9 = 5.5

Attitude Towards Performing Groups

Class A
-7.5 = 9.16

Class B
-4.8 = 5.86

Class C
-3.5 = 7.66

Class D
-3.45 = 5.5

Figure 11

Instrumental Preferences

Class A
-13.55 = 9.8

Class B
-2.0 = 9.8

Class C
-2.6 = 5.9

Class D
-2.2 = 5.9

Figure 13

= Average number of total attitude points gained or lost for each instrument.

= Average number of attitude points gained or lost by classification of instrument.

Instrumental Preferences

Class A
classical = 9.65
popular = 6.2
both = 12.8

Class B
classical = 7.05
popular = 6.4
both = 8.2

Class C
classical = 7.35
popular = 7.2
both = 8.0

= Average number of attitude points gained or lost for each question.

= Average number of students who moved in a positive direction for each question.
APPENDIX A

SPECIAL CURRICULUM

CURRICULUM TO ACCOMPANY YOUNG AUDIENCES CONCERTS

Developed for use from January through March, 1972
Parker Road School
Sixth Grades

by Sister M. Tobias Hagan

General Purpose: to intensify the experience of Young Audience Concerts by related classroom activity.

Behavioral objectives for the students: that the students will be able to identify orchestral instruments aurally and visually;

that the students will use an expanded vocabulary based on understanding of specific ideas in musical situations related to those of the concert experiences.

Sequence of activities:

1. Survey of Jazz Styles
2. Characteristics of Jazz
3. Jazz Concert
4. Follow-up Activity — Worksheet and Discussion
5. Instrument Families
6. Filmstrip on Brass Instruments
7. Brass Concert
8. Use of Brass Instruments in Popular Music
9. Music for Percussion Instruments
10. Percussion Instruments in Latin American Music
11. Percussion Concert
12. Percussion Instruments in African Music
13. Filmstrip on Percussion Instruments
14. Use of Instruments in Symphonies and Concertos
15. Music for Woodwind Instruments
16. String Quartet
17. Strings Concert
18. Music for Cello and Voice
19. Opera Study — 1st part
20. Opera Study — 2nd part
21. Bel Canto Concert
22. Filmstrip on Woodwind Instruments
23. Woodwind Concert
24. Recognition of Instruments in Music

N.B. Lessons three, seven, eleven, seventeen, twenty-one, and twenty-three are concerts.

Lesson One: Survey of Jazz Styles
AIM: recognition of jazz as a style of music in which a great amount of variety exists;

recognition of the historical origins and progress of jazz playing

EQUIPMENT: books and recordings — MAKING MUSIC YOUR OWN, Grade 8, copyright 1971 (enough copies of the books for each student to use one)

PROCEDURE: Have the students read the first two paragraphs of Chapter 5. Explain that they may encounter words they do not understand. Ask them to list these on a piece of paper, telling them that they should be able to find the meaning of these words in the study of the next few classes.

Proceed to cover as much of the information and music in Chapters 5 and 6 as possible.

Make the records and books available to the students so that they can listen to some selections again or listen to more selections as they wish. Encourage them to do this. Possibly a listening station might be set up in the library.

Lesson Two: Some Characteristics of Jazz
AIM: recognition of some specific aspects of jazz playing

EQUIPMENT: books and recordings — MAKING MUSIC YOUR OWN, Grade 8, copyright 1971

PROCEDURE: Use the suggested procedure in Chapter 4 regarding Timbre and Improvisation. Read, discuss, and listen to recorded examples to clarify understanding of these aspects of jazz playing.

If time permits, study syncopation and blue notes as suggested in the book.

At the end of class, give the students the summary sheet attached. Ask them to complete it and have it ready for discussion at the next class meeting. If syncopation and blue notes were not considered, omit these from the
summary sheet. The last question is a research challenge question. "Scat singing" will probably not be covered in the students' exposure to jazz. Challenge them to find this information from an outside source. Make the recordings and booklet "The Origins and Development of Jazz," Album L25, Follett Publishing Company, available as a resource.

JAZZ WORKSHEET

1. Where did jazz originate?
   
   When? Give approximate dates.
   
   With what people?
   
2. a. What is improvisation?
   b. What is syncopation?
   c. What are blue notes?
   d. How are mutes used in jazz playing?

3. Name three important jazz musicians and tell what instrument each plays.

4. Name an important jazz musician connected with St. Louis and tell why he is connected with St. Louis.

5. What is "scat-singing?"

Lesson Four: Follow-up Activity

AIMS: to confirm some ideas about jazz;
   to give the students experience in exercising independent judgment about musical facts

EQUIPMENT: completed summary sheets about jazz (See Lesson Two.)

PROCEDURE: Divide the students into groups of about six. Have the groups choose leaders to conduct discussion of the questions on the summary sheet. Have the students share their responses to the questions, discussing them until a response satisfactory to the group is determined. The teacher should supervise the groups, acting as a resource check for groups that need information or moderation.

If the discussion does not consume the entire class time, conclude by playing selections of "New Orleans Suite" by Duke Ellington (Atlantic SD 1980).

Lesson Five: Instrument Families

AIMS: recognition of symphonic instruments in families:
   recognition of a variations form

EQUIPMENT: recording of "Young Person's Guide to the Orchestra" by Benjamin Britten (Columbia ML5768);
   listening plan as suggested in the lesson for each student

PROCEDURE: Tell the class that they will hear a work written especially for young people, "Young Person's Guide to the Orchestra," by Benjamin Britten. Britten has written many works that are becoming part of the standard concert repertoire. This present work was written in 1945 for a student concert in London. It is based on a dance written by Henry Purcell, an English composer of the 17th century.

Another name for the work is "Variations and a Fugue on a Theme by Henry Purcell." Purcell's little melody is played by various groups of instruments; the work then culminates in a fugue played by the entire orchestra. The tune is presented six times at the beginning of the work by different families of instruments: whole orchestra, woodwinds, brass, strings, percussion, and whole orchestra. Use of Columbia ML 5768 is suggested because it does not have narration. Some recordings do and the point of the lesson is foiled if the narration gives clues to the sections. After discussing the above material with the class, have them listen to the first section, trying to identify each family of instruments as they are heard.

Then give each student a prepared listening plan. Begin the recording again, telling the students to listen intently to check themselves on their recognition of the instruments. Have them hear the whole work without interruption. Check the students' reactions at the end of the session to gain some idea of their success or lack of it. Tell them that they will have a chance to do this exercise again after they have had further experiences with symphonic instruments. The experience will consist then in their straightening out a scrambled listening plan while hearing the music. That will be a real test of their ability to identify the instruments.

Listening plan for "Young Person's Guide to the Orchestra"

1. the beginning tune played by orchestra
2. " " " " woodwinds
3. " " " " brasses
4. " " " " strings
5. " " " " percussion
6. " " " " orchestra
Thirteen variations of the tune

<table>
<thead>
<tr>
<th>Instruments</th>
<th>Meter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. 2 flutes and piccolo</td>
<td>3/4</td>
<td>very fast</td>
</tr>
<tr>
<td>8. 2 oboes</td>
<td>4/4</td>
<td>slow</td>
</tr>
<tr>
<td>9. 2 clarinets</td>
<td>6/8</td>
<td>medium fast</td>
</tr>
<tr>
<td>10. 2 bassoons</td>
<td>4/4</td>
<td>fast, march like</td>
</tr>
<tr>
<td>11. violins</td>
<td>3/4</td>
<td>high, brilliant</td>
</tr>
<tr>
<td>12. violas</td>
<td>3/4</td>
<td>the same speed but sounding lower</td>
</tr>
<tr>
<td>13. cellos</td>
<td>3/4</td>
<td>a bit slower, sounding even lower</td>
</tr>
<tr>
<td>14. basses</td>
<td>2/4</td>
<td>begins slowly then gets faster</td>
</tr>
<tr>
<td>15. harp</td>
<td>4/2</td>
<td>majestically</td>
</tr>
<tr>
<td>16. 4 horns</td>
<td>3/2</td>
<td>the same speed as before</td>
</tr>
<tr>
<td>17. 2 trumpets</td>
<td>2/4</td>
<td>fast</td>
</tr>
<tr>
<td>18. 3 trombones, tuba</td>
<td>4/4</td>
<td>fast and pompous</td>
</tr>
<tr>
<td>19. percussion</td>
<td>6/8</td>
<td>medium</td>
</tr>
</tbody>
</table>

The Fugue

20. A new melody played fast with all the instruments coming in the same order as above. Listen for each to check yourself.

Lesson Six: Filmstrip on Brass Instruments

AIM: aural and visual recognition of brass instruments


PROCEDURE: Show the filmstrip to the class. Prepare them by asking them to look and listen to the four instruments in the brass family that are considered standard.

When the filmstrip is finished, list their suggestions on the chalkboard. The responses should be narrowed to trumpet, trombone, French horn, and tuba. Ask the students to name them in order from highest to lowest, giving a reason for their arrangement. They should name trumpet, French horn, trombone, and tuba respectively, giving the relative size of the instruments as one reason for their pitch difference.

In preparation for the next class, ask the students to locate some recordings of popular music, current rock, etc., that use brass instruments and bring them to the next class.

Lesson Eight: Use of Brass Instruments in Popular Music

AIM: recognition of various ways of playing brass instruments;

EQUIPMENT: recordings brought by students;

recordings of “Patton” Theme, played by Henry Mancini’s orchestra, (RCA LSP-4350), “Spinning Wheel” played by Blood, Sweat and Tears (Columbia CS-9720) and “Portrait of Louis Armstrong” played by Duke Ellington (Atlantic SD-1589)

PROCEDURE: Have the students determine which brass instruments are used in the three pieces listed above and three selections from records which they brought. Listen to each selection in turn, asking the students to write down the brass instruments they hear in each piece. When all six have been played, check the responses. Discuss incorrect responses, replaying selections which posed difficulties. When the complete list of correct responses has been compiled, play as many of the selections again as possible to confirm the correct responses.

Correct responses:

“Patton” Theme: trumpet, French horn, trombone, tuba; the trumpet plays a solo part

“Spinning Wheel”: trumpet, trombone; the trumpet is the most prominent;

“Portrait of Louis Armstrong”: trumpet solo; trumpet and trombone are included in the accompaniment

Lesson Nine: Music for Percussion Instruments

AIM: recognition of percussion instruments as a family of instruments; recognition of the main melody where simultaneity occurs

EQUIPMENT: recordings of “Liza” by George Gershwin, played by Thelonious Monk, et al. (Riverside Rs 3047); “Theme and Variations for Percussion Quartet” by William Kraft (Bowmar Orchestral Library #83);
a selection of one each of as many different percussion instruments as possible or pictures of percussion instruments.

PROCEDURE: Play "Liza" for the class, asking them to identify the instruments which produce the sounds. They should readily respond piano, drums, and bass. They will probably use drums for the identification for all the percussion instruments used. Tell them that it would be better to use the term "percussion" to refer to all the instruments other than bass and piano in this piece.

Ask the students which instrument plays the most. There will probably be some disagreement about this, but the percussion solo is slightly longer than the piano solo, so the percussion instruments play the most. Having determined this, ask the class to decide which instrument is the more prominent. They should respond that the piano is the more prominent because it plays the main melody while the other instruments accompany.

Then play the first selection of "Theme and Variations for Percussion Quartet." Elicit from the students that the xylophone plays the main melody while the tympani and cymbals add accompanying rhythmic accents.

Play "Variations I and II" for the class. Ask individuals to select from the assortment of percussion instruments available any instruments which they heard or instruments similar to those they heard. Have each one demonstrate the instrument he selects. Through demonstration and discussion, help the students to generalize that percussion instruments are those instruments that are struck, shaken, rubbed, or scratched. Conclude the lesson by playing all of "Theme and Variations for Percussion Quartet."

Lesson Twelve: Percussion Instruments in African Music

AIMS: recognition of tempo change;
recognition of repetition and contrast;

EQUIPMENT: recording of "Drums for the Niaapadudo Dance," "Chorus for the Whissegnikon Dance," "Rhythm: Asookabo," and "Rhythm: Niaapadudo" from Anthology of Music of Black Africa (Everest 3254/5);
bongo drum, conga drum, cowbell and mallet;
a metronome

PROCEDURE: Play "Drums for the Niaapadudo Dance" for the class. Ask them whether there is any change in the drumming throughout the three minutes it is heard. They will notice a slight change in tempo several times. Ask them to listen to hear whether there are any other changes in the music, specifically changes in loudness. The only change they should hear is a slight fading at the end of the recording.

Have several children set up patterns for bongo drum, conga drum, and cowbell with mallet, e.g.,
bongo drum \[ \begin{array}{l} \text{\#} \\ \text{\#} \end{array} \]
conga drum \[ \begin{array}{l} \text{\#} \\ \text{\#} \end{array} \]
cowbell \[ \begin{array}{l} \text{\#} \\ \text{\#} \end{array} \]
Have them play their patterns for one minute, asking them and the class to notice the problems they may have in doing this. If the group is able to repeat the patterns accurately for one minute, they will probably get louder and faster as they play. Discuss this with the class, noting that most people tend to get louder and faster as they repeat anything. Compare this with the African drum beat just heard. The players kept the drumming at the same dynamic level despite changes in tempo. They were skillful enough to control their playing very carefully.

Have the drum players try their patterns again, repeating them for a minute, but being very careful to control both tempo and loudness so that they do not change. If the class is not able to perceive any change in tempo, check the players with a metronome to assure them that they are keeping a consistent tempo.

Tell the class that "Drums for the Niegpadoudou Dance" was recorded at an actual festival in Abomey, capital of the African kingdom of Dahomey. If possible, have them locate this on the map.

Play "Chorus for the Whissegnikon Dance" asking the children to make any comments about it that they wish to make. Someone should notice the repetition of the chant, the chorus repeating what the leader sings.

Play "Rhythm: Asoukabbo" and "Rhythm: Niegpadoudou," explaining that the chanters are reciting word patterns which help them remember the drum rhythms for these dances. After the four pieces have been heard, encourage the children to discuss them freely, remarking about any aspect of the pieces which they noticed.

**Lesson Thirteen: Filmmstrip on Percussion Instruments**

**AIM: reiteration of information about percussion instruments**

**EQUIPMENT:** "The Beat of the Drum" from Musical Sound Books for Children, filmmstrip from Society for Visual Education (A6735A9)

**PROCEDURE:** Show the filmmstrip to the class without detailed introduction or reiteration.

**Lesson Fourteen: Use of Instruments in Symphonies and Concertos**

**AIMS:** recognition of the difference in the use of media in a symphony and a concerto;

- aural and visual recognition of French horn and bassoon

**EQUIPMENT:** a French horn and a bassoon or pictures of same;

recordings of "Rondo" from Concerto for Horn and Orchestra, #3, K. 447, by W. A. Mozart (Columbia MS 6788); First movement of "Classical Symphony" by Serge Prokofiev (Columbia MS 6545);

"Rondo" from Bassoon Concerto in B flat Major, K. 191, by W. A. Mozart, (Musical Heritage Society 10415); "The Fourth of July" from Holidays Symphony by Charles Ives (Turnabout Vox 341469)

**PROCEDURE:** Put the words "symphony" and "Concerto" on the chalkboard. Ask the class if they know what these two words mean. Accept all responses, recording key words under each of the given terms. Explain that each of these is a long piece of music, usually divided into three or four sections. One way to define the terms is to say what plays in each.

To determine this, play "Rondo" from Mozart's Horn Concerto for the class. When it is finished ask the children to say what instruments they heard. Write correct responses on the chalkboard. In discussion lead the students to understand that the French horn was a solo instrument and that the other instruments may be grouped under the heading "orchestra." Thus this rondo is a piece for solo horn and orchestra. Recall that the French horn is a brass instrument, lower than the trumpet, higher than the tuba, a middle voice in the brass family. Show the instrument or a picture of it. Leave the picture or instrument in a place where the children may look at it closely during their free time.

Play the first movement of Prokofiev's "Classical Symphony." Again ask the children to say what instrument they heard, record these on the chalkboard, and generalize that they can be grouped under the heading "orchestra." The reason for this is that no one instrument plays a solo part consistently throughout the piece. There are some short solos, but the instruments play all together most of the time. Thus, this symphony is a piece for an orchestra with no outstanding solo instrument.

If there is time, use "Rondo" from Mozart's Bassoon Concerto and "Fourth of July" in the same manner as the pieces above.

After studying the selections, aid the class to formulate definitions of "symphony" and "concerto" with results similar to those below:

- symphony — a long piece of music, usually in sections, played by an orchestra
- concerto — a long piece of music, usually in sections, played by a solo instrument and an orchestra

**NOTE:** The above definitions are quite limited. Expanded consideration of these two types of music should occur later.

**Lesson Fifteen: Music for Woodwind Instruments**

**AIMS:** recognition of various meters:

- recognition of woodwind instruments
EQUIPMENT: recordings of "Sonata for Bassoon and Piano" by Paul Hindemith (Musical Heritage Society ORH-292); First Movement of "Clarinet Concerto in A Major" by W. A. Mozart (Vox STPL 511.110); First Movement of "Sonata in B Minor for Oboe and Harpsichord" by George Telemann (Amphion CL 2147); "Pendulum" by William Fischer (Embryo SD 520)

PROCEDURE: Give each piece a letter name, concealing the titles of the pieces from the students, e.g.,

Piece A = Sonata for Bassoon and Piano (a short portion)
Piece B = Clarinet Concerto (Use only a short portion of this first movement.)
Piece C = Oboe and Harpsichord Sonata (first movement)
Piece D = "Pendulum" (entire piece)

Give the students the following worksheet to complete as you play each piece for them. When they have finished, if there is time, discuss the responses, checking those parts on which they had difficulty by hearing enough of the piece in question to determine correct answers.

WORKSHEET

Select responses to the questions below from this list or the choices given in the questions. You may not need to use all of the words listed.

woodwind  oboe  harpsichord
bassoon  concerto  piano
  flute  clarinet  orchestra
  trumpet  brass

Piece A: 1. This piece is played by a bassoon and a piano
  2. The bassoon has the main melody.
Piece B: 3. This piece is played by a solo clarinet and an orchestra
  4. It is the first movement of an extended piece called a concerto

5. The meter of the piece is (a) 3/4  (b) 4/4  (c) 6/8  (d) 1/4.

Piece C: 6. The solo instrument in this piece is an oboe. It is accompanied by a harpsichord

7. The meter of this movement is (a) 4/4  (b) 2/4  (c) 3/4  (d) 12/8.

Piece D: The only woodwind instrument heard in this piece is the flute

9. The dynamic level of this piece is generally (a) loud  (b) very loud  (c) medium soft  (d) soft.

Correct answers are written in this copy for the teachers' convenience. They would not be included in the students' copies.

Lesson Sixteen: String Quartet

AIMS: recognition of a string quartet;
exposure to microtonal music

EQUIPMENT: recording of "Four Pieces for String Quartet" by Hans Kox (Tricentennial Music, Washington University, St. Louis, Mo.); a keyboard instrument;
five small drinking glasses of the same size with varying amounts of water in them

PROCEDURE: Write the title "Four Pieces for String Quartet" on the chalkboard. Ask the class to define a quartet. After they respond that it is a set of four, ask them to speculate on what a string quartet is. They may respond correctly that it is two violins, viola, cello, and bass. Have them listen to the first part of "Four Pieces" to check their response. In discussion clarify that they are hearing a standard string quartet consisting of two violins, viola, and cello. The lack of very low sounds should lead them to conclude that they do not hear a bass.

Explain that these pieces are written in a scale system different from those with which they may be acquainted. Refer to the fact that the distance between keys on a piano is a half step. Have someone play each key from middle C to the C above, counting the half steps in an octave. There are twelve.
The pitch sequence that "Four Pieces" uses has thirty-one tones in the octave, so the tones that are adjacent to each other are much closer than the ones of the piano. These tones are called microtones. To illustrate microtones, tones smaller in distance apart than a half step, fill two of the drinking glasses with water so that they sound exactly a whole tone apart when struck with a mallet. Place the other glasses between the first two and fill them so that they sound tones between the two that are a whole tone apart. This tuning, though probably not exact, divides the whole step into quarter tones. An octave divided into quarter tones would have twenty-four divisions. This approaches the thirty-one tone division. Discuss as much information about microtones with the class as you have time for.

Conclude by listening to the "Largo" of "Four Pieces" again so that the students can become accustomed to the sound.

Lesson Eighteen: Music for Cello and Voice

AIMS: recognition that the timbre of a sound is affected by the way the sound maker is activated;

recognition of ternary form (A E A)

EQUIPMENT: recording of Bachianas Brasileiras No. 5 by Heitor Villa-Lobos (Angel 35547)

PROCEDURE: Tell the class that Heitor Villa-Lobos was a Brazilian composer. Have them locate his country on the map. Villa-Lobos wrote nine Bachianas Brasileiras in honor of the great composer Johann Sebastian Bach. The class will hear and study one movement of #5 in this lesson. It is for a soprano and eight celli.

The first movement, "Aria" is a Brazilian lyric song. Listen to a portion of it with the class so that the students can become aware of the smooth flow of the melody. Ask the children to notice that the singer and the cello sound very smooth. The other cello players are plucking the strings of their instruments. This is called playing pizzicato. Not only do the celli play in several ways, bowing and plucking, but the singer also uses her voice in several ways. Play the entire movement, telling the children to listen carefully to the sound makers. Possibly they can determine some structural pattern in the music by noticing how the instruments and the singer are making their sounds.

When the piece is finished the following pattern should evolve from discussion of the sections. Put it on the chalkboard.

A
singer sings "ah"
1 cello bows
other celli pluck

B
singer uses words
all celli bow

C
singer hums
1 cello bows
other celli pluck

Play the movement again, asking the children to check the pattern as they hear the music. Also ask them whether the melody of the second A section is the same as the melody of the first A section. It is, although the second A has no repeats and is so much shorter than the first A.

If there is time, play the second movement for the class. After it is completed, stimulate subjective discussion of the piece.

Lessons Nineteen and Twenty: Opera

NOTE: These lessons are one continuous unit of work. The material will take at least two class periods.

AIMS: recognition of the media of an opera;
recognition of vocal ensembles and solo voice types

EQUIPMENT: recording of "Amahl and the Night Visitors" by Gian Carlo Menotti (RCA LSC-2762);

PROCEDURE: Tell the students that they will hear part of an opera. Ask them what they know about opera. Accept any responses they offer. Explain that opera is the fusion of drama and music. Music, with action and lyrics, conveys the idea the writer and the composer want to communicate.

Tell the class that they will hear a popular television opera, "Amahl and the Night Visitors." Either elicit the story from them (they may have seen it on television) or give them these few hints about the story: Amahl is a crippled boy with a keen imagination. His mother is constantly after him about his fantastic lies. The family is very poor. The Three Kings, on their way to see the baby Jesus, stop at Amahl's house for the night.

Tell the class that the rest of the story will unfold as they hear the opera. Give them a list of characters:

Amahl
his mother
first king, Melchoir
second king, Kaspar
third king, Balthasar
page

The class will not hear Balthasar or the page immediately. Ask them to listen to the recording, up to and including Kaspar's aria, "This is my box." They should note whether these characters have high or low voices. They should also note any other sounds they hear in the music.
When they have heard this half of the opera, discuss the results of their notes. They should have the following voice classifications:

Amahl — high
his mother — high
first king — low
second king — low

Other elements heard were men’s chorus, various orchestral instruments, and knocking. Briefly note that when Amahl and his mother sing together the piece can be called a duet. Elicit the term quartet for the parts when the three kings and their page sing together.

Discuss with the class the name for a woman’s high voice, soprano; a man’s high voice, tenor; a man’s low voice, bass. Ask them what type voice Amahl has. Conclude that he is a soprano, a boy’s voice. Have the students notice that his soprano voice does not sound like his mother’s soprano voice. Listen to a portion of the first section again so that the students perceive this.

To find out about the rest of the story, direct the class to the score. Show them how to follow it. They will need some instruction on the scanning of five or six simultaneous staves.

With the class, listen to the remainder of the opera, having them follow in the score as they are able.

Lesson Twenty-two: Woodwind Filmstrip

AIM: aural and visual recognition of woodwind instruments


outlines for students

PROCEDURE: Explain to the class that they will view a filmstrip about woodwind instruments. Because the woodwind instruments are divided into several kinds, they should use the outline provided to guide their viewing. As they watch, they should fill in the blanks on the outline. There are no extra blanks, but all instruments, even the uncommon ones, are included.

Group 1: The Flutes or instruments like them
1. C flute
2. piccolo
3. alto flute
4. bass flute

Group 2: The Clarinets
1. Eb Clarinet
2. Bb clarinet
3. A clarinet
4. Eb alto clarinet
5. bass clarinet
6. contra-bass clarinet

Group 3: The Double Reeds
1. oboe
2. bassoon
3. contra-bassoon
4. English horn

Group 4: The Saxophones
1. soprano
2. alto
3. tenor
4. baritone
5. bass

Have the students check their outlines by checking against a list of correct answers that you post on the chalkboard or bulletin board. Answers are written here for the teacher’s convenience. They should not be on the students’ outlines.

Lesson Twenty-Four: Recognition of Instruments in Music

AIMS: aural recognition of symphonic instruments;

recognition of a variations form

EQUIPMENT: recording of “Young Person’s Guide to the Orchestra” by Benjamin Britten (Columbia ML6768);

worksheet for each student as suggested below

PROCEDURE: Recall with the students that they heard and followed a listening plan of “Young Person’s Guide to the Orchestra” several weeks ago. (Lesson Five) Since that time they have had a number of experiences with symphonic instruments which should have aided their recognition of the sounds of those instruments.

Introduce the matching worksheet. As they listen to the recording again without interruption, tell them to match the instruments to the numbers as the sections occur. Grade the papers at the end of the session, each one grading his own.

Matching Worksheet

1. the beginning tune played by ________
   a. brass
   b. orchestra
   c. strings
   d. orchestra
   e. woodwinds
   f. percussion

2. “” “” “” “” “”

3. “” “” “” “” “”

4. “” “” “” “” “”

5. “” “” “” “” “”

6. “” “” “” “”

32 36 33
13 Variations

7. ________________
8. ________________
9. ________________
10. ________________
11. ________________
12. ________________
13. ________________
14. ________________
15. ________________
16. ________________
17. ________________
18. ________________
19. ________________
20. the fugue played by all the instruments

a. violas
b. 3 trombones and tuba
c. violins
d. 2 flutes and piccolo
e. 2 oboes
f. percussion
g. 2 clarinets
h. basses
i. harp
j. 4 horns
k. 2 bassoons
l. cellos
m. 2 trumpets

APPENDIX B

1. Jazz Quintet
2. Brass Quintet
3. Percussion Ensemble
4. String Quartet
5. Bel Canto Ensemble
6. Woodwind Quintet

APPENDIX C

MUSIC TEST

NAME ____________________________
GRADE AND TEACHER _______________________
AGE ____________________________

DO YOU PLAY A MUSICAL INSTRUMENT?  
YES ______  NO ______

DOES ANYONE IN YOUR FAMILY PLAY A MUSICAL INSTRUMENT?  
YES ______  NO ______

DO YOU PLAY OR SING IN ANY MUSICAL ORGANIZATION OUTSIDE OF SCHOOL?  
YES ______  NO ______

DOES ANYBODY IN YOUR FAMILY SING IN A CHOIR?  
YES ______  NO ______

DOES YOUR FAMILY EVER GO TO THE SYMPHONY?  
YES ______  NO ______

HOW MUCH DO YOU LISTEN TO MUSIC AT HOME?  
NEVER ______  A LITTLE ______  SOMETIMES ______  VERY OFTEN ______

The following section of the test will show your ability to recall certain things about music. Read each question carefully because you will have to answer each question differently. If you do not know how to answer a question, skip that question and go on to the next one. Although spelling errors will not be counted, try to spell each word carefully so the grader of the test will know what your answer means.

1. Write the names of four composers that you know wrote symphonies.
2. Put an X next to the instruments which are found in a string quartet.

    __guitar   __piano   __violin   __harp   __viola   __cello

3. Arrange the following musical periods from the oldest to the newest.

    Baroque, Classical, Romantic, Contemporary

    ___________________________ (oldest)

    ___________________________

    ___________________________ (newest)

4. Fill in the following.
A. Duet, aria, and recitative are terms used in what musical form?

    ___________________________

B. Improvisation, blue notes, and scat singing are terms used in what musical form?

    ___________________________

C. What Baroque composer is said to be the father of polyphony?

    ___________________________

5. Haydn and Mozart were composers from which musical period?

    ___________________________

6. Put an X next to all the ways you know how to play a percussion instrument.

    scratching   rubbing   ______

    biting       shaking   ______

    striking     blowing   ______

7. Put an X next to all the types of musical forms which are found in the Romantic period?

    symphonies   jazz   ______

    sonatas      art songs   ______

    musicals    operas   ______

8. Tell which instrument family (brass, woodwind, string, or percussion) the following instruments are from.

    Fr. horn   ______

    flute     ______

    cello     ______

    claves    ______

    oboe      ______

    harp      ______

9. Fill in the following.
A. Which country gave birth to Jazz?

    ___________________________

B. Bach and Beethoven lived in which European country?

    ___________________________

C. Composers started writing symphonies in which country?

    ___________________________

D. Name one great composer who wrote many operas.

    ___________________________

E. About how many years ago was the piano invented?

    ___________________________

10. After each of the following composers name one piece which he wrote.

    Bach   ___________________________

    Beethoven   ___________________________

    Chopin   ___________________________

    Debussy   ___________________________

    Listen to a short musical selection featuring one musical instrument. Select from four choices the name of the instrument featured. If no one of the instruments is featured, fill in the blank (0).

    Ex. A. TRUMPET ( ) BASSOON ( ) FR. HORNS ( ) VIOLIN ( ) NCNE (0)

    61. FLUTE ( ) CLARINET ( ) TRUMPET ( ) PICCOLO ( ) NCNE (0)

    62. VIOLA ( ) CELLO ( ) VIOLIN ( ) BASSOON ( ) NCNE (0)

    63. BASS DRUM ( ) TIMPANI ( ) TUBA ( ) CONGA DRUM ( ) NCNE (0)

    64. VIOLIN ( ) CELLO ( ) VIOLA ( ) CLARINET ( ) NCNE (0)

    65. TRUMPET ( ) TROMBONE ( ) FR. HORNS ( ) ENG. HORN ( ) NCNE (0)

    66. FLUTE ( ) CLARINET ( ) TRUMPET ( ) PICCOLO ( ) NCNE (0)

    67. SAX ( ) Cello ( ) FR. HORNS ( ) BASSOON ( ) NCNE (0)

    68. MARACAS ( ) CLAVES ( ) WOOD BLOCK ( ) CASTANETS ( ) NCNE (0)

    69. SAX ( ) Cello ( ) ENG. HORN ( ) BASSOON ( ) NCNE (0)

    70. HARP ( ) VIOLIN ( ) VIOLA ( ) Cello ( ) NCNE (0)
Listen to a short musical selection featuring one instrument with orchestral accompaniment. Select from four choices the name of the instrument featured. If no one instrument is featured fill in the blank marked (0).

Ex. A. FLUTE ( ) VIOLIN ( ) CLARINET ( ) FR. HORN ( ) NONE (0)
B. TROMBONE ( ) TRUMPET ( ) FR. HORN ( ) ENG. HORN ( ) NONE (0)
C. OBOE ( ) ENG HORN ( ) BASSOON ( ) VIOLA ( ) NONE (0)
D. FLUTE ( ) CLARINET ( ) OBOE ( ) PICCOLO ( ) NONE (0)
E. ENG. HORN ( ) VIOLA ( ) CLARINET ( ) BASSOON ( ) NONE (0)
F. FR. HORN ( ) TROMBONE ( ) SAX ( ) TUBA ( ) NONE (0)

Appendix D

Questionnaire

Each of the following sentences are statements which some people believe to be true. You are to show how you feel about each statement. First decide whether you agree or disagree with the statement. If you mostly agree with the statement, put an X in the place marked (MA). If you somewhat agree with the statement, put an X in the place marked (SA). If you agree only a little with the statement, put an X in the place marked (LA). On the other hand, if you disagree a little with the statement, put an X in the place marked (LD). If you somewhat disagree with the statement, put an X in the place marked (SD). If you mostly disagree with the statement, put an X in the place marked (MD). If you don’t understand what the statement means, put an X in the place marked (0).

Here is a sample statement which has already been done —
A. I like candy. (MA) (SA) (LA) (LD) (SD) (MD) (0)

This person decided that he mostly agreed with the statement because he liked candy very much, so he put an X in the place marked (MA).

Here are two sample statements to practice on. Be sure to read each statement carefully and be sure to answer the way you feel about each statement.

B. I like to watch television. (MA) (SA) (LA) (LD) (SD) (MD) (0).

C. I would rather go to a baseball game than attend a symphony concert. (MA) (SA) (LA) (LD) (SD) (MD) (0)

1. Nixon is a good president. (MA) (SA) (LA) (LD) (SD) (MD) (0)
2. The draft should be abolished. (MA) (SA) (LA) (LD) (SD) (MD) (0)
3. Pollution is very bad. (MA) (SA) (LA) (LD) (SD) (MD) (0)
4. I like long hair on boys. (MA) (SA) (LA) (LD) (SD) (MD) (0)
5. All war should end immediately.
(MA) (SA) (LA) (LD) (SD) (MD) (?)

6. The only music I like to listen to is popular music.
(MA) (SA) (LA) (LD) (SD) (MD) (?)

7. Playing a musical instrument is a waste of time.
(MA) (SA) (LA) (LD) (SD) (MD) (?)

8. Listening to classical music makes me feel emotional.
(MA) (SA) (LA) (LD) (SD) (MD) (?)

9. Symphony concerts are too long.
(MA) (SA) (LA) (LD) (SD) (MD) (?)

10. I like to listen to women opera singers.
(MA) (SA) (LA) (LD) (SD) (MD) (?)

11. School grades are very important to me.
(MA) (SA) (LA) (LD) (SD) (MD) (?)

12. I wish I had different teachers for all my subjects.
(MA) (SA) (LA) (LD) (SD) (MD) (?)

13. Going to school is the best thing I could be doing.
(MA) (SA) (LA) (LD) (SD) (MD) (?)

14. Winning or losing a fight is not important.
(MA) (SA) (LA) (LD) (SD) (MD) (?)

15. I would like to become a classical musician.
(MA) (SA) (LA) (LD) (SD) (MD) (?)

16. I enjoy going to museums.
(MA) (SA) (LA) (LD) (SD) (MD) (?)

17. I like going to concerts where they play classical music.
(MA) (SA) (LA) (LD) (SD) (MD) (?)

18. I like to listen to music because I can forget my problems.
(MA) (SA) (LA) (LD) (SD) (MD) (?)

19. I would rather play sports than watch them.
(MA) (SA) (LA) (LD) (SD) (MD) (?)

20. I like field hockey.
(MA) (SA) (LA) (LD) (SD) (MD) (?)

21. I enjoy going to football games.
(MA) (SA) (LA) (LD) (SD) (MD) (?)

22. I only like music which has a good beat.
(MA) (SA) (LA) (LD) (SD) (MD) (?)

23. I enjoy listening to classical records.
(MA) (SA) (LA) (LD) (SD) (MD) (?)

24. Listening to any music is a waste of time.
(MA) (SA) (LA) (LD) (SD) (MD) (?)

25. I like going to baseball games.
(MA) (SA) (LA) (LD) (SD) (MD) (?)

26. I would like to become a professional athlete.
(MA) (SA) (LA) (LD) (SD) (MD) (?)

27. I like to read science fiction stories.
(MA) (SA) (LA) (LD) (SD) (MD) (?)

28. I like to read history books.
(MA) (SA) (LA) (LD) (SD) (MD) (?)

29. I would like to play a musical instrument in the high school band or orchestra.
(MA) (SA) (LA) (LD) (SD) (MD) (?)

30. I enjoy listening to country western music.
(MA) (SA) (LA) (LD) (SD) (MD) (?)

31. The only records I enjoy listening to are rock records.
(MA) (SA) (LA) (LD) (SD) (MD) (?)

32. Winning or losing a war is not important.
(MA) (SA) (LA) (LD) (SD) (MD) (?)

33. I want to go to college.
(MA) (SA) (LA) (LD) (SD) (MD) (?)

34. I wish I could hear more classical music.
(MA) (SA) (LA) (LD) (SD) (MD) (?)

35. I would like to learn more about all kinds of music.
(MA) (SA) (LA) (LD) (SD) (MD) (?)

36. I like to write stories.
(MA) (SA) (LA) (LD) (SD) (MD) (?)

37. We should follow a leader if he is right, even if we might get hurt.
(MA) (SA) (LA) (LD) (SD) (MD) (?)

38. I would like to travel to foreign countries.
(MA) (SA) (LA) (LD) (SD) (MD) (?)
39. I enjoy listening to symphony orchestras.
   (MA) (SA) (LA) (LD) (SD) (MD) (?)

40. I like listening to woodwind instrumental groups.
   (MA) (SA) (LA) (LD) (SD) (MD) (?)

41. I like to listen to small groups singing classical music.
   (MA) (SA) (LA) (LD) (SD) (MD) (?)

42. I only like to listen to rock groups.
   (MA) (SA) (LA) (LD) (SD) (MD) (?)

43. I like listening to string instrumental groups.
   (MA) (SA) (LA) (LD) (SD) (MD) (?)

44. I like to listen to percussion groups.
   (MA) (SA) (LA) (LD) (SD) (MD) (?)

45. I like listening to brass instrumental groups.
   (MA) (SA) (LA) (LD) (SD) (MD) (?)

46. I like to listen to jazz musicians.
   (MA) (SA) (LA) (LD) (SD) (MD) (?)

47. People should learn more about our cultural heritage.
   (MA) (SA) (LA) (LD) (SD) (MD) (?)

48. I like watching Channel 9 on television.
   (MA) (SA) (LA) (LD) (SD) (MD) (?)

49. Watching television is a waste of time.
   (MA) (SA) (LA) (LD) (SD) (MD) (?)

50. These statements are about —
   a. Music
   b. Sports
   c. School
   d. My feelings
   e. All of the above

In the following section, there is a list of people, places, or things. You are to tell how you feel about each of them. First decide whether you like or dislike the person, place, or thing. If you like it very much, put an X in the place marked (LM). If you somewhat like it, put an X in the place marked (LS). If you only like it a little, put an X in the place marked (LL). If you dislike it only a little, put an X in the place marked (DL). If you somewhat dislike it, put an X in the place marked (DS). If you dislike it very much, put an X in the place marked (DM). If you do not know what it is, put an X in the place marked (?)

Here is a sample which has already been done.

A. Bad grades.
   (LM) (LS) (LL) (DL) (DS) (DM) (?)

This person decided he disliked bad grades very much because he felt very badly when he received them, so he put an X in the place marked (DM).

Here are two samples to practice on. Be sure to read each word carefully and be sure to answer the way you feel about each word.

B. Birthday cake
   (LM) (LS) (LL) (DL) (DS) (DM) (?)

C. Swimming
   (LM) (LS) (LL) (DL) (DS) (DM) (?)

1. Gym class
   (LM) (LS) (LL) (DL) (DS) (DM) (?)

2. Cafeteria
   (LM) (LS) (LL) (DL) (DS) (DM) (?)

3. History
   (LM) (LS) (LL) (DL) (DS) (DM) (?)

4. Spelling
   (LM) (LS) (LL) (DL) (DS) (DM) (?)

5. Geography
   (LM) (LS) (LL) (DL) (DS) (DM) (?)

6. Arithmetic
   (LM) (LS) (LL) (DL) (DS) (DM) (?)

7. Art
   (LM) (LS) (LL) (DL) (DS) (DM) (?)

8. Drums
   (LM) (LS) (LL) (DL) (DS) (DM) (?)

9. Electric guitar
   (LM) (LS) (LL) (DL) (DS) (DM) (?)

10. Piccolo
    (LM) (LS) (LL) (DL) (DS) (DM) (?)

11. Oboe
    (LM) (LS) (LL) (DL) (DS) (DM) (?)

12. Bass guitar
    (LM) (LS) (LL) (DL) (DS) (DM) (?)

13. Organ
    (LM) (LS) (LL) (DL) (DS) (DM) (?)

14. War
    (LM) (LS) (LL) (DL) (DS) (DM) (?)
THE CUMULATIVE ATTAINMENT BY MISSOURI HIGH SCHOOL SENIORS OF THE MUSICAL LEARNINGS STATED IN THE MUSIC CURRICULUM GUIDES PUBLISHED BY THE MISSOURI STATE DEPARTMENT OF EDUCATION

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The purpose of this study was to determine the residual attainment in music by students enrolled in the public schools of Missouri. The findings give a measure of how successful the school music program has been in terms of the general student in meeting stated goals. In addition, this study sought to identify factors that correlate to musical learnings.

Some years ago the present investigator discovered that the desired outcomes of some phases of musical training were not being realized. During the school year 1963-64 the investigator initiated undergraduate elective classes in music appreciation and understanding at the University of Missouri-Rolla. Most of the students were freshmen just out of high school.

The students entering the classes displayed little general knowledge about music other than current popular or social music. So that an effective planning could be made for the classes, the first day of the course each new class was given a generalized test on items of music information. Questions on these tests were based upon material in the Missouri public school curriculum guides in music.

These results convinced the investigator that a formal study, including a wider, more representative sample, and including a more comprehensive, better constructed test, would provide important and useful information regarding music education in Missouri.

Data collected in this study are intended to be descriptive. However, implications are drawn in a number of ways. For example, it is possible to raise some questions about the Missouri curriculum guides in music themselves, especially about what is expected of all students. Findings are also helpful in clarification of the objectives of teachers of music, especially in determining which areas of the discipline have been stressed the most. Data from this test that depart in a positive direction from normal expectations are interpreted as indicative of describing better conditions for musical learning; conversely, data of a negative direction identify conditions in which musical learning is not so apt to take place. A musical profile is determined for the student who is a graduate of Missouri public schools.

These data are extremely helpful in preparing course work on a higher education level for either the general student or the student who intends some degree of specialization in music.
RESUME OF METHODS, PROCEDURES, AND ASSUMPTIONS

To secure the necessary data, a test and self-report inventory were administered to a representative sample of twelfth grade students enrolled in Missouri public schools. The test consisted of two parts:

1. The first was a musical information test consisting of multiple-choice and objective questions based on the content of the music curriculum guides for Missouri schools. The reliability, validity, and index of difficulty and discrimination were established for each item by preliminary testing in out-of-state high schools before administering the final form to Missouri students. The final test form satisfied the statistical assumptions about effective tests. The coefficient of reliability was .873. (See Appendix C.)

2. The second part was an aural music discrimination test consisting of 30 examples from the Indiana-Oregon Music Discrimination Test by Newell H. Long. It measures the students' capacity to notice aurally changes in the music and to make discriminative judgments. The test was validated, and its reliability and index of difficulty and discrimination were determined on an item-by-item basis. Statistical assumptions were also satisfied for this test. The coefficient of reliability was .814. (See Appendix B.)

Information was obtained from each examinee by means of a self-report inventory. (See Appendix C.) It secured data about the type of school music training, including elementary school music, general music, music appreciation, the amount and nature of any private or other non-school music training and experience, concert attendance, home musical environment, and each examinee's general attitudes toward music. It was also determined how long each examinee had been enrolled in the particular school system.

Information was gathered from school officials at each testing site in order to determine the musical climate of each school. Questions were asked about the emphasis given musical assembly concerts, the frequency of the various music courses in each system, the breadth of other musical activities, and turnover of music teachers. A questionnaire and personal interviews were used to obtain these data.

The data obtained from the questionnaire and inventory were organized in such a way that a score could be coded for each item and an interpretation derived by use of a multiple linear regression computer program.

The sample was representative of the population it purports to represent. (See Appendix A.) Elements of the sample varied in the same proportion that the State of Missouri varies. The stratified sample was necessary to give a proportionate representation of high schools of varying sizes and locations. Categories established for this study include: Inner City, the incorporations of St. Louis and Kansas City; Urban, counties with incorporations of 10,000 or more; Middle, counties with incorporations of 2,500 to 9,999; and Rural, counties with no incorporations larger than 2,500. Sample schools were selected at random from each category.

Comparisons were made between the upper and lower 27 percent of scorers on the tests on the various independent variables. This procedure not only demonstrated the effectiveness of the tests, but it also helped in interpretation of the tests, and the significance of the independent variables.

Rules for the effective administration of tests were carefully followed.

The test, inventory, and questionnaire used in this study measured specifically these areas:

1. The ability to answer correctly questions about music in the areas of media, period, style, form, composers, works, notation and identification of terms.

2. The development of auditory acuity including judgments about examples played in which the elements of harmony, rhythm, or melody may have been changed.

3. The degree and kind of music training of each examinee.

4. Each examinee's attitude toward music.

5. The music program of each school in the sample.

CONCLUSIONS

The following conclusions deal with the attainment and retention of musical learnings by the examinees:

1. The general student had not learned originally, or retained if he did learn it, much information called for in the music guides. The student with specialized training in music, such as school band or private piano, has retained only a little more information than the general student. There was a mean score on the 73 item written test of 28.33. There were 60 items in the aural test with a mean score of 28.32. The high and low scores dispersed normally about the mean on each of the tests. This is true for the mean for the entire sample, each stratum, and each individual school. Although consideration must be made for the fact that some of the examinees had not had music since the seventh grade, a period of five years, it seems that more musical information should have been retained. A few of the items on the test were very easy and obvious, but some examinees answered only a few of these correctly.

2. Seventy-six percent of the answers to the items that dealt with identification of musical media were answered correctly. This category had the easiest questions. Students in all types of schools except Inner City did well on these items. Perhaps some exposure to the instruments is a common experience that is reinforced by the study of instruments being presented in school music.
3. Fifty-three percent of the examinees scored correct responses on the items in which they were to notice aurally rhythmic change. Rhythm is emphasized from kindergarten on in the guides and is a part of discriminatory hearing expected of all students. The rhythmic change part of the test is a part of a larger aim: discrimination in hearing.

4. Only 43 percent of the responses to the items that concerned a knowledge of form were correct. This category included general questions such as whether a symphony had movements or scenes. It would seem that some detailed study or contact with serious music forms would be necessary in order for this sort of information to be retained. It appears that the only contact most of the examinees had with a great body of the world of music has been in school music classes. The guides outline singing as the core experience in the music program for the elementary grades and in the general music class on the junior high level. It is not until the senior high general music curriculum that the development of the music consumer is actually specified as a chief end goal. However, few students in the sample had had general music in high school. These points apply to the other categories on the test as well, in which familiarization with a variety of works of music would have helped provide more correct responses. In short, knowledge and understanding of what makes up music was largely lacking on the part of the examinees.

5. A mean of 41 percent correct responses was achieved on the items that concerned a knowledge of musical terms. Since all of the items on the test are basic terms that according to the guides should have been taught by grade six, as well as encountered in ensembles, the manner in which they were introduced and taught must be questioned.

6. In the category of aural recognition of harmonic change there was a 39 percent correct response. Again there is the matter of discriminatory hearing — a goal cited in the curriculum guide as early as grade six. The results of such tests are affected a great deal by the presence or lack of the continued practice of this skill. Critical hearing from within an amateur ensemble is one thing — how one’s own part fits. It is another thing to stand aloof from a music event to listen to it critically, the approach emphasized only in the Allied Arts Guide. This implies training in listening to styles of music. This can be done in almost all school music classes. It has not been done in the case of a majority of the examinees in the sample.

7. There was a 33 percent correct response to the items on aural recognition of melodic change. Most of the items in this category involve changing of melodic patterns or intervals, or so completely mutating the melody that it would be difficult not to know that melody was the element that was changed. The most common error was the selection of the mutated version as being better.

8. Thirty-two percent of the responses to the items about musical period, style, and composers were correct. All of the guides emphasize performing music. But since few general history books or courses give any

space or time to what has happened in the arts, it must be taught in music classes. This investigator must conclude that there has been a minimum of this type of training in musical groups. This situation may have been due to an emphasis on performances at games and contests, and a great deal of rote training rather than teaching.

9. A disappointing finding was the 28 percent correct response to the items on notation. A portion of the items in this category asked for identification of well-known melodies from notation. Another part of the test asked for identification of notational errors and a knowledge of scales. Few examinees were able to score at all in the notation category. It must be concluded that the emphasis on singing in the guides, the emphasis on improving the skills and understanding of notation suggested in conjunction with ensemble activity and the emphasis on following a score while listening has somehow been largely wasted, if indeed it was taught at all. It seems that many instrumentalists see a note on the staff and think only of a fingering rather than respond mentally to the pitch of a total pattern. For example, according to the guides the melody to the Star Spangled Banner should have been recognized from seeing the notation. Few of the examinees could identify it. Some examinees had had band, chorus, or other performance experiences and most were still active at the time of testing. And yet the examinees exhibit very little fluency in this area. While some students could probably pick the tune out quickly on some instrument or at the keyboard, they did not recognize it in notation.

The following conclusions deal with the differences between strata:

1. Those students from the Rural schools scored highest. In six of the eight categories — knowledge of media, aural recognition of rhythmic change, knowledge of form, knowledge of terms, aural recognition of melodic change, and knowledge of notation — the mean score for students from Rural schools was above the mean score for the entire sample. In the category of aural recognition of harmonic change they equaled the mean for the entire sample. Only in the category of period, style, and composer did the mean for this group fall below that of the entire sample. These schools are in farming locales with limited industry. The student population was observed to be almost all white and dressed conservatively. According to the school principals interviewed, some of the subject areas were weak, but all of the schools had an active high school music program. The strength of the music programs was centered in the high schools, to the neglect of the elementary programs. Most of these students had been in the same school system all of their lives. Some of the facilities were obviously in poor condition, although one school was new. Enrollments are small. Financial support is limited because of low property valuation. The music directors in the high schools have established ways of doing things. Sweeping changes in practices in music teaching are seldom undertaken, and winning of contests and trophies is very important to them as a mark of success. Students give a good deal of time to music performance activities. Differences in individuals are minimized in instruction. The schools reflect an orderly, regulated sameness, where discipline comes first. The variety of music offerings is generally limited to band, chorus, stage band and an occasional musical production.
2. The examinees from the Middle and Urban schools performed about equally on the tests, but, of the two, examinees from the Middle category did better. This group consisted of areas supported by both farming and industry. All but one school of the type had some serious problem affecting the music program. In three of the schools there was a frequent turnover of high school music teachers, and in two of the schools frequent changes in superintendents and principals. Discipline was observed by the investigator to be lax. Support and concern for the music program from both administrators and the general public was reported to be weak by the music teachers. Pride in school organizations was missing. Racial integration had affected one school. These schools enter many music contests but seldom win the higher ratings.

The Urban schools had broader music programs, including several choirs, general music, related arts classes, theory, and bands, and one school had an orchestra. They were mostly white. High contest ratings were sought and generally attained, but were taken somewhat in stride. Students frequently moved, but to and from other Urban areas. There were two types of Urban school in the sample tested. One serves the children of "blue-collar" workers, the other serves children of professional persons. There did not seem to be a mixture. The attitude of the examinees during testing was one of confidence, almost to the point of boredom. The few extremely high scorers came from this group of schools. The music programs, though varied and containing many students, were not always among the main interests of the students. The students seemed to have independence, and it is possible that they exercised too much of it when selecting the better of the pairs of examples on the aural test: by allowing what they liked to influence their judgment, rather than what they knew.

3. The examinees in the Inner City schools scored below the mean for the entire sample in every category except aural recognition of rhythm change. In this category they only matched the sample mean. The Inner City schools served many black students. Few of the students were college bound. The music offerings were limited to band and vocal groups. Ensemble emphasis was toward the experience of musical productions and shows. Morale among the music teachers was low. However, the students seemed to regard the test as a challenge.

The following conclusions are based upon the statistical analysis of school and home factors with the test scores:

1. The high scorers on the written test are not necessarily the high scorers on the aural test. Likewise, the low scorers on the written test are not necessarily the low scorers on the aural test. The correlation between the tests is .4249.

2. The greater the amount of music activities and classes offered by the school, the higher the examinees tended to score. The highest correlations included frequency that school band, chorus, and orchestra is offered, and whether or not a school offers stage band and solo/ensemble activities.

3. Of the many individual variables for which correlations with the test scores were computed, the most significant relationships were with applied music experiences, especially band, stage band, private instrumental instruction, and self-rating of ability to play an instrument. Low scorers had had almost no applied music experience. Although high scorers had extensive musical experiences and low scorers did not, this study does not contain data separating home and school music training. Some relationship is indicated, however.

4. The longer the examinee had been enrolled in the particular school system, the higher he tended to score. The more years an examinee had been in Missouri public schools, the higher he tended to score. A fairly significant correlation supports these conclusions.

5. In the aural discrimination test each examinee had to decide which of two examples fit best into his perceptual experience. It is assumed that the more musical experience the examinee had, the greater his chances for making informed, correct decisions. Not that he would say to himself, "This example has a V chord and that one doesn't." However, as one notices, if there is incorrect grammar in a sentence he hears, so one can notice what he hears in music. Evidence in this study suggests a modest relationship between experience and aural discrimination. For example, 36 percent of the sample (115) played an instrument, yet less than half of these students (55) were among high scorers on the aural test. However, only 11 were among the low scorers.

The following conclusions deal with the effectiveness of the guides:

1. Generally, examinees from schools that used the guides did better on the tests than examinees from other schools.

2. The effectiveness of the guides would have been enhanced if the objectives of music in the Missouri public schools had been more clearly defined. There are numerous statements in the guides to the effect that music is important and should be a part of the curriculum. However, the guides offer few specific standards, usually employing terms such as "knowledge of," "appreciation of," and "understanding of." They also reflect the general practices of much singing in the elementary school and performance emphasis in the secondary school. There is also an inconsistency between the sections that deal with the various ensembles. Some of the sections are more specific than others. Each was obviously written by a different author or committee.

RECOMMENDATIONS

The development of a continuous music curriculum guide for grades K - 12 is needed. The guide should include areas on music history, style, composers, works, reading and understanding of notation, and development of critical judgment in music. At least three sections are needed: a general music section for all students, a vocal music section, and an instrumental section. The guide should specify what the student should know and be doing at the end of each grade level. The activities of each successive grade of music should be based on content in the previous grade and be an extension
of that grade. The relationship between music in general education and performance ensembles and activities, especially in junior and senior high school, should be established so that the various facets of the music in general education are also taught in ensembles. This is especially necessary since those who elect a performance ensemble are seldom allowed time for other school music study.

State requirements for accreditation of public schools include offering elementary music and fine arts on the secondary level. Unfortunately, in the secondary schools the fine arts requirement is satisfied in no consistent manner. Depending on the offering of the school, a student may select band, chorus, art, orchestra, allied arts, general music, drama, theory, or in some cases, a general music course in the seventh and eighth grades. The amount of credit awarded for these courses also varies with the schools. For example, a seventh grader in one school may take band for one year and receive the required fine art unit, then may not elect band again. Another student at another school may need to take band for two or even four years before one unit is earned. At yet another school a student may earn a fine arts credit by taking a comprehensive allied arts course. If formal music training is to be ended in grade six for some students, then a broader elementary music curriculum is needed. However, more desirable would be a music requirement at the senior high school, rather than the present fine arts requirement to be met any time in secondary school. It would also seem both necessary and practical that a uniform amount of credit be given for musical ensembles in the schools of Missouri, perhaps on the basis of the number of class hours of meetings per week.

SUGGESTIONS FOR ADDITIONAL RESEARCH

A primary question for study is why examinees with some knowledge of music and with extensive music performance experience fail to hear discriminately. This investigation uncovered the fact again and again. This investigator has determined that there are different kinds of hearing skills. Determining more about the relationships between acquired knowledge, performance facility, and aural acuity would be a valid and important study.

An interesting study would be the administration of an aural test similar to the one used in this study, except that it be made of examples taken from current popular music instead of from art music.

A determination of the amount of time spent in music by the pupils, both in school and out, would make a valuable study. The school workload, outside activities, and time spent in homework could be compared between pupils engaged in music and pupils with few music activities. A study similar to this one should be made in five or ten years, followed by a comparison between the two.

APPENDIX A

SELECTION OF THE SAMPLE

The population about which this study makes inferences concerns the graduates of public high schools in the State of Missouri. Therefore, the selection of the sample had to be done in such a way that any student in Missouri high schools had an equal chance of being tested.

To achieve the most representative sample, the following steps were taken:
1. Each public high school in the state was entered by name, enrollment, and county on a 3 by 5 inch card. This information was taken from the 1938-39 Missouri School Directory, an official publication of the Missouri State Department of Education, Jefferson City.
2. A map of Missouri was obtained, showing counties, so that a working visual aid would be available.
3. After the cards had been arranged in alphabetical order by county a sample was drawn in the following ways: ten high schools obtained by drawing every fifteenth card, ten high schools at random drawing, 15 high schools by drawing every thirty-fourth card, and 20 high schools by drawing every twenty-fifth card. None of these methods seemed to provide a representative sample. Either the geographical locations seemed askew, or data as to school size seemed lumped and not representative. The need for a stratified sample was seen in the fact that 67 percent of the high schools contained only 35 percent of the school population. With a random drawing of high schools from the State at large the results would contain a disproportionate number of small schools. So a stratified sample technique was decided upon.
4. Using data provided by the Secretary of State of Missouri, counties were divided into four categories termed Rural, Middle, Urban, and Inner City. The cards were separated by county into these four strata. Four high schools were selected at random from each strata, except for the inner City strata from which one high school was selected for each of the two areas designated Inner City.

The 317 subjects in the sample are one half of one percent (0.46 percent) of the estimated twelfth grade population in Missouri public schools in the 1959-70 school year. The 14 high schools are 2.73 percent of the total 511 high schools in Missouri.

According to the principals at each school, all students had a chance of being included in the sample. The exception was School 4, which was examined while senior band rehearsal was going on.

APPENDIX B

DESCRIPTION OF THE AURAL DISCRIMINATION TEST

The test, as assembled by Dr. Newell H. Long in August 1968, was arranged on one spool of magnetic tape containing instructions, three examples, and the 30 items. The speed of the monaural tape was 7½ i.p.s., and dubbing of the copy used in this study was done by an electrical engineer at Indiana University's Department of Electromics. The total elapsed time for this portion of the test, including instructions and examples, was 42 minutes. Each of the items has an excerpt of several seconds' duration of music by a recognized composer. A second playing (sometimes presented as the first of the pair) contains a mutation involving one of the following elements: rhythm, harmony, or melody. The examinee is asked to select which of the pair he thinks is correct (best), if he thinks there is a change, and which element is mutated — rhythm, harmony, or melody.
The distribution of the 30 items included 14 with the first version correct, 13 with the second version correct, and three items which had no elements changed. Of the 27 items in which there was a change, ten involved rhythm, nine harmony, and eight melody. Five of the examples were representative of the baroque period, seven the classical period, ten the romantic, and eight contemporary. Twenty-two of the items were played on the piano, five by string quartet, and three by woodwind quintet. Indices of difficulty and discrimination and coefficients of reliability were established by Long for this test, but since none had been determined for twelfth graders, the investigator computed them for the sample tested in this study. Items ranged from easy to difficult, and the easy items were interspersed throughout the test.

The Long test can consist of a 30-item unit, a 37-item unit, or a 43-item unit. Long actually recommended the 30-item test for upper elementary students, the 37-item test for junior high, and the 43-item test for high school and adult subjects; but he also suggested that as few as 30 items might be used with high school and adult subjects with no great loss in reliability. Therefore, it was felt by the investigator that the purposes of this investigation would be satisfied by using the 30-item test. Since the required courses in music in general education in Missouri can be satisfied on the junior high level, the investigator felt the level of this test sufficient. There were enough of the 30-items with sufficient discriminating power and difficulty to provide results that satisfy statistical testing assumptions.

The aural test is not considered a comprehensive measure of the ability to appreciate music. Rather, it is considered an instrument for evaluating certain aspects of listening and judgment which function in making musical discrimination. Other aspects involved in musical knowledge, as information, must be tested for by other means. This aural test tests only some aspects that are assumed to help the listener in dealing with understanding an entire work of musical art.

The aural test has other limitations. No attempt is made to measure discrimination of form, nor is an attempt made to measure the student's perception of timbre. It is composed of selections only from "serious" or "artistic" music. Examinees are not asked to make discrimination judgments about performance quality.

APPENDIX C
MUSIC ACHIEVEMENT TEST
Information — Inventory

(The correct answer is underlined or written in the appropriate space. Following the correct answer is the Index of Difficulty followed by the Coefficient of Discrimination.)

1. Which instrument has a keyboard?
   a. Marimba
   b. Saxophone
   c. Piano
   d. Tuba
   
   .94 and .11
   58

2. Which instrument can play the lowest note?
   a. Piccolo
   b. Trumpet
   c. Alto Saxophone
   d. Baritone Horn
   
   .73 and .30

3. Which person was not a composer of music?
   a. Beethoven
   b. Bach
   c. Brahms
   d. Wedgewood
   
   .87 and .43

4. Which musical group is most useful out of doors?
   a. Choir
   b. Band
   c. String Trio
   d. Vocal Quartet
   
   .64 and .19

5. Which instrument is least likely to be a member of the symphony orchestra?
   a. Violin
   b. Cello
   c. Trumpet
   d. Guitar
   
   .75 and .11

6. Which is the highest pitched type of voice?
   a. Baritone
   b. Alto
   c. Tenor
   d. Soprano
   
   .75 and .40

7. All but one of the following is an American composer. Which one is not?
   a. Richard Strauss
   b. Aaron Copland
   c. Leonard Bernstein
   d. Duke Ellington
   
   .31 and .44

8. Composers whose musical works contain the folk-tunes of their native country are called:
   a. Symphonists
   b. Nationalists
   c. Theorists
   d. Songsters
   
   .58 and .21

9. All, except one, of the following music media use both voices and instruments. Which one does not?
   a. Art Song
   b. String Quartet
   c. Oratorio
   d. Cantata
   
   .23 and .55

   59
10. All, except one, of the following music forms take place on stage with costumes and movement. Which one does not?
   a. Opera
   b. Ballet
   c. Oratorio
   d. Musical Comedy

11. All, except one, of the following music forms usually have more than one movement. Which one does not?
   a. Symphony
   b. Sonata
   c. Suite
   d. Tone Poem

12. Which musical instrument would be difficult to march with?
   a. Clarinet
   b. Cello
   c. Fife
   d. Drum

13. Dances have played an important part in instrumental music. Many of our instrumental pieces are derived from dances. Mark all of the following that were or are dances.
   a. Waltz .63 and .23
   b. Rock .40 and .16
   c. Rondo .81 and .09
   d. Minuet .41 and .20

14. Chamber music was so called because it was played in a room (chamber) that was not extremely large. It usually refers to music in which there is just one player to a part. Which term does not designate a chamber music combination?
   a. String Quartet
   b. Piano Trio
   c. Concerto .38 and .41
   d. Sonata for Oboe and Piano

15. Listed are four nationalist composers and four of their compositions. Match the composer and his composition by placing a, b, c, and d in the proper space on the answer sheet.
   Aaron Copland a. Appalachian Spring .16 and .34
   Edvard Grieg c. Peer Gynt Suite .09 and .28
   Jean Sibelius b. Finlandia .06 and .45
   Edward Elgar d. Pomp and Circumstance .04 and .20

16. Which form of music usually uses more than 1 theme?
   a. Lied
   b. Rondo .06 and .00
   c. Folk Song
   d. Round

17. Put these composers or musical events into the period of music history in which they belong by placing a, b, c, etc., in the proper space on the answer sheet. Answer all items.
   a. Chopin Renaissance ch(j)* .13 and .44
   b. Stravinsky Baroque e(i) .07 and .00
   c. Palestrina Classical g(j) .16 and .22
   d. Wagner Romantic ad(j) .06 and .36
   e. Handel Modern bfk .09 and .08
   f. Jazz became widespread .65 and .45
   g. The symphony as a form began .19 and .38
   h. Madrigal is popular .07 and .36
   i. Monteverdi .28 and .08
   j. Beethoven .35 and .39
   k. Copland .17 and .53
   l. Bach .02 and .37

18. Put these music forms into the larger forms of music of which they are a part. Use the answer sheet.
   a. Aria Symphony d .15 and .34
   b. Recitative Opera abc .13 and .38
   c. Act and Scenes Suite efg .55 and .51
   d. Sonata Allegro Form .31 and .34
e. Gigue .22 and .34
   f. Sarabande .16 and .34
   g. Allemande .20 and .38

19. Match the following musical terms and symbols with the appropriate definition. Use the answer sheet.
   a. A term used to indicate a lively or brisk speed of music. Allegro .45 and .63
   b. The pitch of a note is to be raised one whole step. Bémolo .14 and .61
   c. A Spanish dance in moderate triple time. Cadenza .28 and .64
   d. A sign to indicate a special emphasis be given a note. Decrescendo .36 and .68
   e. The largest bowed stringed instrument. Fagotto .73 and .56
   f. The interval between the 1st and 8th note of consecutive diatonic tones. Fuga .55 and .60
   g. Instructions to the performer to perform the piece with a feeling of majesty. Fortissimo .31 and .71
   h. The staff marking for the alto clef. G clef .41 and .63
   i. A passage near the end of a movement of music where the soloist improvises or plays alone on the material in the music. Staccato .13 and .66

*Answers in parentheses accepted in either of periods shown.
+Only ten of 317 examinees answered this correctly. Correction for chance formula gives a negative index.
20. Harmony, or the sounding together of several notes as chords, enriches certain types of music. Which of the following types of music would contain harmony?
   a. Music for a vocal quartet .65 and .70
   b. Drum music for a parade
   c. A scale played on a clarinet
   d. None of the above

21. In which of these items would harmony be of least importance?
   a. Music for a vocal quartet
   b. Drum music for a parade .43 and .37
   c. Scales on a clarinet
   d. None of the above

22. Much of our music is written in some mode or key. The most common keys are called major and minor. Which of the following would be most apt to be written in a major mode or key?
   a. Funeral March
   b. Blues Tune
   c. Football March .31 and .33
   d. Snare Drum Solo

23. Which term indicates music should be performed at a slow speed?
   a. Adagio .6 and .73
   b. Coda
   c. Presto
   d. Tempo

24. Musical pitches are names "a," "b," "c," and so on. Scales as do, re, me, etc., or 1, 2, 3, etc. Following are some statements about music pitches and scales. Mark the incorrect statement.
   a. The scale in the key of C major begins on C and ends on C.
   b. The scale of C major has seven different notes.
   c. In the C major scale, do, re, and me would stand for C, D, and E, and also for 1, 2, and 3.
   d. In the C major scale there are three flats, Bbic, Cbic, and Abc.

25. Which of the following samples is in a major mode or key?
   [Musical notation image]

   *Although sixty examinees answered this item correctly, the index derived is a negative number due to the correction for chance element in the formula.

26. Which measure contains an example of syncopation?
   a.
   b.
   c.
   d.

27. Which musical symbol means to repeat the section of musical material?
   a.
   b.
   c.
   d.

28. Which example represents an incorrect use of the term?
   a. Staccato
   b. Tie .4 and .32
   c. Natural
   d. Ieast

29. Following are two familiar tunes. Sing them to yourself. Put the number of the measures containing errors in pitch in the appropriate place on the answer sheet. (There are three measures with errors in each example)
   [Musical notation images]
30. Below are five familiar tunes. Sing them to yourself (not aloud) and write the name of each tune in the space indicated on the answer sheet. Each tune is shown as it begins.

a. America .19 and .73
b. America the Beautiful .12 and .58
c. Star Spangled Banner (or National Anthem) .18 and .68
d. Down in the Valley (or Hear the Wind Blow, or Birmingham Jail)
e. Voice Boat Song .03 and 1.00

31. Each of the following examples has an error in rhythm. Put the number of the measure you think has an error in the appropriate spot on the answer sheet.

a. 1.  2.  3. .16 and .51  4.  5.

b. 1.  2.  3. .08 and .53  4.  5.

c. 1.  2.  3. .15 and .45  4.  5.

PART III: Please answer the following questions about yourself. Use the answer sheet for those items which apply to you. Mark an X on the answer sheet to indicate which of the following music you have had in school:

A. Public School Music in Grades 1-6. (one point, if any)
B. Public School Music in Grades 7-8. (one point, if any)

C. Junior High School General Music, or Allied Arts. (one point, if this course was taken)
D. Senior High School General Music, or Allied Arts. (one point, if this course was taken)

(On music instruction and participation outside of school, each of the following categories was scored as follows: One point for 1 year, Two points for 2-4 years, and Three points for 5 or more years.)

E. Class piano instruction in school for _______ Years.
F. Band in school for _______ Years. (What instrument?)
G. Choir in school for _______ Years.
H. Stage band in school for _______ Years.
I. Orchestra in school for _______ Years. (What instrument?)
J. Solo and/or ensemble activities in school for _______ Years.

Mark an X on the answer sheet to indicate which of the following music you have had outside of school:

K. Private piano for _______ Years.
L. Private voice for _______ Years.
M. Private instruction on other instrument for _______ Years.
N. Sung in church choir for _______ Years.
O. Played or sung in civic events for _______ Years.

P. Played or sung professionally. Describe.

Mark an X on the answer sheet or provide the information asked about music in your home:

Q. Number of people in your home who play piano or some other instrument.
R. Number of musical instruments in your home.
S. Number of people in your home who sing.
T. Do members of your family play or sing together in your home?
   Yes — No (If yes, 1 point; if no, 0 points)

Check the answer in each case that most nearly fits you:
U. How often do you attend concerts or operas? (Any kind of musical concert)
   a. Never (0 points)
   b. Upon occasion (1 point)
   c. Frequently (2 points)
   d. Very often (3 points)
   e. On every possible occasion (4 points)
V. How often do you listen to musical programs on radio, television, or play the record player?
   a. Never (0 points)
   b. Upon occasion (1 point)
   c. Frequently (2 points)
   d. Very often (3 points)
   e. On every possible occasion (4 points)

Rate yourself using the following answers that most nearly fit you. Please use the answer sheet.

W. How well can you sing?
   a. Can’t carry a tune. (0 points)
   b. Can just sing a tune. (1 point)
   c. Can sing before small audiences. (2 points)
   d. Can sing before large audiences. (3 points)
   e. Can sing professionally. (4 points)

X. How well do you play an instrument?
   a. Not at all. (0 points)
   b. Can’t read music but can pick out a tune. (1 point)
   c. Can read music a little. (2 points)
   d. Can play for a small group and my own amusement. (3 points)
   e. Can play recitals or concerts in public. (4 points)

Y. How musically talented do you think you are?
   a. Very much below average. (0 points)
   b. Somewhat below average. (1 point)
   c. Average. (2 points)
   d. Somewhat above average. (3 points)
   e. Very much above average. (4 points)

Z. How well can you read music?
   a. Not at all. (0 points)
   b. Can read various notes, rests, etc. (1 point)
   c. Can read music, but slowly. (2 points)
   d. Can read music with ease. (3 points)

Check the statement below in each case with which you agree the most. (All kinds of music included)

AA. How well do you like music? (Answer only 1)
   a. I like music but I could live without it. (0 points)
   b. I like music as well as other forms of entertainment. (1 point)
   c. Music is a real pleasure to me. (2 points)

BB. How important do you think music is? (Answer only 1)
   a. Music is not for me in any form at all. (0 points)
   b. Music is OK for those who like it. (1 point)
   c. Music adds to many of our activities and life would be dull without it. (2 points)

CC. When I do listen to music . . . (Answer only 1)
   a. I sort of like it, but I don't always understand what's going on all of the time. (1 point)
   b. I like it for short periods of time. (2 points)
   c. Music is too formal for me. (0 points)
   d. I like music best when it tells a story I can understand. (2 points)

DD. Many people have become famous composers and musicians. (Answer only 1)
   a. I admire composers and musicians but would not care much for it myself. (1 point)
   b. It is unbelievable that anyone would want to spend his whole life doing music. (0 points)
   c. Music is one of the highly respected professions. (2 points)

FINAL COMMENTS TO THE READER

During the course of this study considerable statistical data was obtained. Because of space limitations these data are not included in this monograph, but may be found in the dissertation (218 pp.) which is available through University Microfilms or through inter-library loan from Indiana University. However, most of these data deal with correlations between test scores and individual personal musical experiences, and although significant are not central to the thrust of this study which is the amount of musical learnings retained.

Likewise, statistical formulae used in this study are not included in this abstract as a matter of space, but are fully described in the dissertation.

An exhaustive study of the four Missouri curriculum guides for music — elementary, junior high, senior high, and allied arts — was made by the investigator to determine the emphasis given the various areas of music training. From this study the particular questions used in the tests developed for this study were based. The process of evaluation of the guides for this purpose is shown in extensive detail in the study.

Finally the investigator does not presume that the tests used in this study measure all of the facets of school music training, but they are comprehensive enough to give a measure of much of the desired outcomes of school music training according to the guides. Data obtained from the examinee had to be obtained within a one-hour session and tests and the inventory were constructed accordingly.
THE STRUCTURAL ORGANIZATION
OF THE SUBJECT MATTER OF MUSIC
FOR ELEMENTARY AND JUNIOR HIGH CURRICULA

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The organization of the subject matter of music according to structural theo- ries requires three things: (1) a clear definition of the structural dimensions of music that is applicable to all music, whatever its origin; (2) a statement of what there is to learn about these dimensions and their interactions; (3) a spiraling order of the material to be learned from the easiest to the most difficult. The following considerations of these points form the foundations for the listening curriculum developed by this author for Grades Kindergarten through Nine in "The Structural Method of Teaching Music Listening, Grades Kindergarten through Nine," a doctoral dissertation completed at Washington University in St. Louis, Missouri, in 1971.

I. Dimensions of Music

The dimensions of music may be loosely defined as those intrinsic elements which make music what it is. These intrinsic elements may concern characteristics of an isolated tone or tones in combination, whether vertical (tones sounding together) or horizontal (tones sounding in sequence). The attributes of a tone or combined tones are defined physically and psychologically. The psychological attributes of tones, which are the physical attributes as they are perceived by the listener, will be the basis for the definition of the structural dimensions of music here. They are pitch, loudness, timbre, and duration.

Lundin adds to the above, volume, density, and brightness. The meaning he gives to these terms is included in timbre as it will be defined here.

Culver speaks of pitch, quality, loudness, and resonance. His use of quality corresponds to timbre. Resonance concerns vibrations within the cavity in which the sounds occur. This is also an aspect of timbre.

For a practical definition of the structural dimensions of sounds in music, a hierarchy of three levels of perception, stated in psychological terms, seems most suitable. On the most basic level, the components of music are sound and silence, the simple presence or absence of sound. The second level consists of the specific properties of the individual sounds and silences. The dimensions at this level are:

1. pitch: perception of the highness or lowness of sound
2. duration: perception of the time length of the sound
3. timbre: perception of the quality of a sound based on what generates it and how it is generated
4. loudness: perception of the degree of audibility of the sound

Silence has only one dimension, duration.

The third level defines the dimensions of sounds and silences when they are combined, either vertically or horizontally or both. These correlate directly with the dimensions of level two.

From pitch of individual sounds flows:
1. pitch sequence: the highness or lowness of sounds in a horizontal series in relation to one another and to the underlying pitch set from which the tones are derived.

From duration of individual sounds and silences comes:
2. rhythm: the durational pattern in sounds and silences as they relate to one another and as they are measured by a time module.

From timbre flows the dimension:

From loudness comes:
4. dynamic level: the degree of loudness of tones in relation to one another and the loudness of a total sound sequence.

Two other dimensions are added at the third level of perception:
5. simultaneity: the result of sounds occurring together at one time.
6. form: the repetition or contrast that results when more than one sound occurs in a sequence.

The simple definition of the dimensions at the third level belies the complexity of material utilizing these dimensions. The complexity stems from the interaction of the dimensions in actual musical situations and the various ways in which they have been used throughout the history of music. A comprehensive categorizing of the various aspects of the dimensions as they are generally used and as they are used in specific historical or ethnic styles would constitute fourth and fifth levels in the hierarchy of perception. This listing would be a project of such vast scope that it would far transcend the limits of this paper. The author realizes that a knowledge of musical style will most probably result from the study of the dimensions of music and their interactions in various pieces of music. For the purpose of this project it will be sufficient to list the aspects of each dimension which are considered to be a part of the total body of subject matter to be taught from kindergarten through the ninth grade.

It is to be noted that the definition of the dimensions of music at all three levels can be applied to all sound, not music exclusively. The agent which distinguishes music from other sound (noise) is organization. When pitch, rhythm, media, dynamic level, simultaneity, and form are organized, whether the manner of organization be highly structured or aleatoric or random, music is the result. When they are not organized, the result may be said to be noise.

II. The Structure of the Material to be Learned

THE SUBJECT MATTER CONTENT

There are concepts to be learned about each of the dimensions of music and their interactions. Conceptual statements of material to be learned about each of the dimensions of music, as defined at the third
level of perception, are stated below. These are limited to those basic notions about the dimensions generally thought suitable for inclusion in the average child’s musical study from its beginning through the ninth grade.

The concepts were drawn from a compendium of factual material gleaned from curricula of five large school systems in various parts of the country, from lists of material contained in four of the leading textbooks series for use from kindergarten through eighth grade, from graded attainments listed in five selected college textbooks for teacher training in music at the elementary level, and from selected books about the dimensions of music.

The material to be learned, proposed in this paper, is not utterly unlike that found in the above sources. This author has very little quarrel with the factual material included in these sources. Their faults lie in the orientation, statement, and organization of the materials. The innovative contribution of this article is the structural approach to the subject matter, the conceptual statement of the material to be learned, and careful cycling of material from the easier to the more difficult. It offers a logical, economical, and efficient manner of organizing development in knowledge about music.

CONCEPTUAL STATEMENT OF MATERIAL TO BE LEARNED

The material to be learned grows out of the following basic concepts. The concepts are stated in relation to each of the dimensions of music. Sub-statements are examples of facts related to the basic concepts. They are not all inclusive but are simply to illustrate the conceptual statement.

I. Pitch Sequence
   A. Understanding of pitch in music growing out of perception of relative highness or lowness
      1. tonal direction of several pitches: up, down, same
      2. pitch sequences in which tones are close together or widespread
   B. Understanding of the representation of the pitch of aural phenomena by mutually agreed upon symbols
      1. line notation
      2. numbers and letters
      3. use of sol-fa
      4. conventional notation
      5. other: graphic notation, etc.
   C. Understanding that pitches can be classified into sets (scales)
      1. major
      2. minor
      3. other modes
      4. 12 tone
      5. microtonal
   D. Understanding of the structure of the various sets
      1. intervallic relation of pitches within a set
      2. in tonal sets:
         a. recognition of the tonal center
         b. recognition of the relation of pitches in the set to the tonal center
   c. recognition of the function of key signatures
   d. recognition of the relation of one set to other sets, e.g., major to minor — relative or parallel

II. Rhythm
   A. Understanding of rhythm in music growing out of perception of the relative duration of sounds
      1. relative duration of several sounds: long or short
      2. two to one relationships; three to one relationships
      3. effect of tempo on duration: fast, slow, or degrees between
   B. Understanding of pulse, its characteristics and function
      1. recognition of the function of a metronome in measuring the duration of sounds
      2. perception and feeling of consistent pulse
      3. recognition of accents and their function
      4. recognition of the function of a pulse grouping in relation to the duration of sounds in particular circumstances
   C. Understanding of the representation of the durational aspects of aural phenomena by mutually agreed upon symbols
      1. rhythm of word syllables
      2. graphic notation
      3. conventional notation: note values, bar lines, meter signatures

III. Media
   A. Understanding of the use of media in music growing out of perception of differences in the timbre of sounds
   B. Understanding of the fact that the timbre of sound is determined by
      1. what makes it, e.g., the material producing the sound, its size, and its shape
      2. who makes it, e.g., the agent activating the sound production material
      3. how it is made, e.g., blowing, striking, plucking, etc.

IV. Dynamic Level
   A. Understanding of the use of dynamics in music growing out of perception of relative loudness of sounds
   B. Understanding of the representation of relative loudness of aural phenomena by mutually agreed upon symbols
      1. graphic notation
      2. conventional dynamic markings

V. Simultaneity
   A. Understanding of simultaneity in music growing out of perception of more than one sound occurring at the same time
      1. recognition that texture thickens as the number of simultaneities increases and thins as the number decreases
B. Understanding of the fact that simultaneity may be primarily linear (horizontal) or primarily vertical
   1. polyphony
   2. homophony
   3. amphony
C. Understanding of the relative importance of consonance and dissonance
   1. relativity of the terms consonance and dissonance
   2. role of consonance and dissonance in tonality; in atonality; in polytonality
D. Understanding of the representation of the simultaneity of aural phenomena by a mutually agreed upon system
   1. stacking of notes as an indication of simultaneity
   2. stacking of staves with vertical alignment of notes indicating simultaneity
E. Recognition of various systems of simultaneity
   1. tonal harmony
   2. simultaneity in pentatonic, whole tone, or 12 tone systems
   3. unrestricted simultaneities: environmental sounds, aleatoric music

VI. Form
A. Understanding of the use of form in music growing out of perception of repetition and contrast in a series of sounds
B. Understanding of the function of repetition, contrast, and variation in determining structural forms: conventional forms, free forms
C. Understanding of the representation of formal elements of music by mutually agreed upon symbols
   1. conventional, e.g., repeat marks, first and second endings, etc.
   2. other

VII. The Cycling of the Material
The ordering of the material supporting the foregoing concepts is the next step in building a structural, cyclic curriculum. The material must be stated factually, then ordered in a gradually spiraling cycle from the most fundamental fact to be learned to the most difficult and complex. This cycle must be stratified so that realistic attainments for each grade can be stated.

It is important to note that once any aspect of any dimension of music is placed in the spiral, it continues throughout the cycle, becoming broader and deeper at successive levels of the spiral. A student at the most advanced level should still encounter the most fundamental fact learned in his musical experience.

Awareness of the stages of development posited by Jean Piaget regarding a child’s supposed receptivity to certain kinds of knowledge at various stages, as well as the intrinsic simplicity or complexity of the subject matter, influences the position of each item in the cycle.

FACTUAL STATEMENT OF MATERIAL TO BE LEARNED RELATING TO EACH DIMENSION

I. Pitch Sequence
A. Understanding of the use of pitch growing out of perception of relative highness or lowness
   1. perception of pitches as high or low or in between in relation to one another
   2. perception of pitches as close together or widespread, e.g., stepping or skipping within a major scale
   3. perception of pitch sequences as moving up, down, or staying the same
   4. perception of conjunct pitch sequence and disjunct pitch sequence
   5. aural recognition and vocal reproduction of pitch sequences within major and minor scales by association of sol-fa syllables to sound
B. Understanding of the representation of the pitch of aural phenomena by mutually agreed upon symbols

VI. Form
A. Understanding of the use of form in music growing out of perception of repetition and contrast in a series of sounds
B. Understanding of the function of repetition, contrast, and variation in determining structural forms: conventional forms, free forms
C. Understanding of the representation of formal elements of music by mutually agreed upon symbols
   1. conventional, e.g., repeat marks, first and second endings, etc.
   2. other

D. Recognition of the structure of the various sets
   1. intervallic relation of pitches within a set
      a. structure of major and minor scales; arrangement of whole and half steps in relation to piano keyboard; forms of minor — natural, harmonic, melodic
      b. structure of other scales: modal, whole tone, 12 tone, pentatonic, other
      c. in tonal sets: recognition of tonal center; recognition of relation of other pitches in set to tonal center; recognition of the function of key signatures; recognition of the relation of one set to another: major to relative minor and parallel; minor, tonic to dominant, tonic to sub-dominant; experience of key shifts and modulation
   d. structure of microtonal systems
E. Recognition of the function of the sets of pitches
1. understanding of the relation of a particular pitch sequence to the set upon which it is based
2. melodic devices: sequence; octave transposition; neighboring tones; passing tones; retrograde; inversion; retrograde-inversion
3. recognition of main melody in situations where simultaneity occurs

II. Rhythm
A. Understanding of the use of rhythm in music growing out of perception of the relative duration of sounds
1. perception of sounds as long or short in relation to one another
2. feeling of two to one relationships; three to one relationships
3. perception of tempo: fast, slow, or degrees between
4. perception of relation of tempo to description and expression; relation of tempo to form; relation of tempo to dynamic level; relation of tempo to changes in metrical groupings
B. Recognition of pulse, its characteristics and function
1. perception and feeling of steady pulse
2. recognition of the function of a time module in measuring the length of sounds
3. recognition of accents and their function of grouping pulses
4. perception of the difference between the pattern of the sounds and the pulse
5. recognition of the function of a pulse grouping in relation to the duration of sounds in particular circumstances: perception of groupings by two, three, and four; recognition that some sounds move with the pulse (beat), some move faster, and some move slower
6. recognition of syncopation and polyrhythm
C. Understanding of the representation of the durational aspects of aural phenomena by mutually agreed upon symbols
Recognition and use of:
1. rhythm patterns of words
2. bar lines and measures
3. meter signatures; measures in relation to meter signatures: simple meters, e.g., 2/4, 3/4, 4/4, 4/2 and compound meters, e.g., 6/8, 6/4, 9/8, 12/8; complex or unusual meters; changing meter, polymeter
4. note and rest values: two to one relationships — whole, half, quarter, eighth, sixteenth
   three to one relationships — dotted whole, dotted half, dotted quarter, dotted eighth, dotted sixteenth
5. augmentation
6. diminution
7. durational pattern as different from beat or meter, but as related to beat or meter or other durational module
8. tied notes

9. terms: allegro, andante, largo, presto, vivace, allegretto, ritard, accelerating
10. unusual notation of rhythm, e.g., time modules in Haebenstock-Ramati's Liasons

III. Media
A. Understanding of the use of media in music growing out of the perception of differences in the timbre of sounds
1. discrimination of two or more sounds as the same or different
2. recognition of own vocal production: singing as distinct from speaking
3. aural and visual recognition of common classroom instruments: autoharp, recorder, resonator bells, various percussion instruments
4. aural and visual recognition of symphonic instruments, Latin American instruments, keyboard instruments, folk and informal instruments
5. recognition of ancient instruments and unusual instruments, e.g., newly invented ones as those of Harry Partch
6. aural recognition of various vocal qualities and ranges: women's voices — soprano, contralto; men's voices — tenor, baritone, bass
7. recognition of vocal and instrumental ensembles: women's chorus, men's chorus, mixed chorus, vocal quartet, trio, duet; orchestra, band, string quartet, woodwind quintet, trios of various composition
8. experience of other vocal and instrumental ensembles
9. experience and manipulation of environmental sound sources
10. experience and manipulation of electronic sound sources
B. Recognition that the timbre of sound is determined by:
1. what makes it, e.g., the material producing the sound, its size and shape
   a. recognition and use of sounds made by metal, skin, wood; large objects generally make lower sounds; small objects generally make higher sounds
   b. discrimination between sounds made by strings, wind, metal, wood, skin
2. who makes it, e.g., the agent activating the sound production mechanism; differences in performers
3. how it is made, e.g., blowing, striking, plucking, bowing, scraping, rubbing, singing
4. recognition that the manner of playing affects the sound: staccato, legato, portanto, glissando, marcato
5. recognition of the relation of timbre to expressiveness and description
6. recognition of the change in timbre related to dynamic change

IV. Dynamic Level
A. Understanding of the use of dynamics in music growing out of perception of the relative loudness of sounds
1. recognition and use of loud, soft, and degrees between; sudden change; gradual change

70 71 75
2. understanding of relation of dynamics to melodic contour; relation of dynamics to tempo; use of dynamics for expressiveness and description

B. Understanding of the representation of the relative loudness of aural phenomena by mutually agreed upon symbols
   1. recognition and use of: piano, forte, crescendo, decrescendo, mezzoforte, mezzopiano, pianissimo, fortissimo
   2. experience of dynamics in graphic notation: size, intensity of color, and thickness of symbols as indications of dynamics

V. Simultaneity
A. Understanding of the use of simultaneity growing out of perception of more than one sound occurring at the same time
   1. recognition that texture thickens as the number of simultaneities increases and thins as the number decreases
B. Recognition that simultaneity may be primarily linear (horizontal) or primarily vertical
   Recognition and use of:
   1. polyphony: imitative, canonic, non-imitative, counterpoint in terms of contrast with homophony
   2. homophony: chords, chordal accompaniment — block chords, repeated chords, broken chords, sustained chords
C. Recognition of the relative importance of consonance and dissonance
   1. relativity of the terms consonance and dissonance
      a. recognition of intervals: 3rds, 5ths, 4ths, octaves, 2nds, 6ths, 7ths
      b. definition of consonance as simultaneity that rests, requiring resolution; definition of dissonance as simultaneities that do not rest and seem to require resolution
   2. consonance and dissonance in tonality; in atonality; in polytonality
      a. recognition and use of consonance and restricted dissonance
      b. recognition and use of unrestricted dissonance
D. Understanding of the representation of the simultaneity of aural phenomena by a mutually agreed upon system
   1. recognition of stacking of notes as an indication of simultaneity
   2. recognition of stacking of staves with vertical alignment of notes indicating simultaneity
E. Recognition of various systems of simultaneity
   1. tonal harmony
      a. relation of "do" to tonic chord in major; relation of "la" to tonic chord in minor
      b. chord structure: stacked 3rds, 4ths, 5ths
      c. chord progression: use of I, V7, IV, ii; use of i, V7, iv
      d. harmonic rhythm
      e. key relationships: relation of a specific chord to different tonal centers

VI. Form
A. Understanding of the use of form in music growing out of perception of repetition and contrast in a series of sounds
   1. recognition of repetition, contrast, and variation
B. Recognition of the function of repetition, contrast, and variation in determining structural form
   1. formal elements: theme, cadence, sequence, phrase, introduction, coda
   2. formal devices: ostinato, fugue, echo, antiphon
   3. sectional forms: binary, ternary, variations, rondo, sonata allegro
   4. contrapuntal forms: fugue, chaconne, passacaglia
   5. through-composed forms: free forms
C. Understanding of the representation of formal elements of music by mutually agreed upon symbols
   1. conventional: repeat marks, first and second endings, d.c. al fine, fine, dal segno
D. Understanding of the relation of form to other dimensions
   1. influence of media on form: symphony, sonata, concerto, opera, oratorio
   2. principles of unity and variety in large forms

SPIRALING CYCLE OF MATERIAL TO BE LEARNED
A graphic representation of the spiraling cycle of material follows. The spiral is shown in two ways: vertically, to illustrate progress through the subject matter in depth, the easier concepts being at the bottom of the spiral; and horizontally, to illustrate the broadening of knowledge that should take place, the easier concepts being in the center of the spiral.

The spiral is divided into six areas, representing the six dimensions of music. It is also stratified, representing the division of material into graded levels.
A factual statement of the material relating to each dimension, stratified according to grade level, follows. This material would fit into the corresponding columns and levels on the diagrams.

The reader should always bear in mind that once any aspect of any dimension of music is placed in the spiral, it continues throughout the cycle, becoming broader and deeper at successive levels of the spiral. A student at the most advanced level should still encounter the most fundamental fact learned in his musical experience, but in a more complex way. It is also important to note that the actual musical selections chosen may contain materials that can be used at different levels. For example, Stravinsky's "Double Canon for String Quartet" might be used at the seventh grade level for a study of the twelve tone system; it might also be used at the first grade level for a study of texture thickening as simultaneities increase.

Generally, progression in contact with the material to be learned goes from exposure to perception, then to recognition and manipulation. Exposure to all aspects of each dimension of music is presupposed at the earliest grade levels. It consists of the mere presence of the musical reality in proximity to the learner. Perception is difficult to measure, however, it is supposed to occur when the listener's attention has been directed to the musical stimulus. Recognition consists in the identification of some aspect or aspects of the musical dimensions heard in a piece of music. Manipulation is had when the learner has sufficient control over a musical fact to use it himself.

In order to facilitate application of the actual statement of the material to the diagrams of the cycle, the following pages should be read from bottom to top.

I. Pitch

N.B. READ THIS PAGE FROM BOTTOM TO TOP

EXPOSURE TO

Grade 9 exposure to electronic notation

Grade 8 recognition and use of graphic notation; manipulative experience with key shifts and modulations

Grade 7 recognition of the structure of modal, whole tone, twelve tone, pentatonic and other scales; recognition of melodic devices: sequence, octave transposition, inversion, retrograde inversion

Grade 6 recognition of one tonal set to another: major to relative and parallel minor; recognition of the forms of minor: natural, harmonic, melodic; recognition of the structure of minor scales; manipulation of microtonal sets

Grade 5 recognition of the structure of major scales; arrangement of whole and half steps on the keyboard

Grade 4 recognition and use of the letter names of pitches in relation to the keyboard; recognition and use of the letter names of the lines and spaces of the grand staff

Primary 3 recognition of the main melody in situations where simultaneity occurs; recognition of the relation of a particular pitch/sequence to the scale on which it is based; recognition of the relation of pitches in tonal sets to the tonal center; recognition and use of key signatures
Primary 2
manipulation of sol-fa syllables applied to written notation;
aural recognition and vocal reproduction of pitch sequences in major and minor modes by association of sol-fa syllables to sound

Primary 1
aural recognition of tonal centers in tonal pieces:
recognition and use of retrograde, neighboring tones, and passing tones;
recognition and use of conventional pitch notation in ascending, descending, and repeated patterns on the staff;
recognition and use of conventional pitch notation in ascending, descending, and repeated patterns without staff lines;
recognition and use of line notation as a representation of pitch contour;
perception of pitch sets: pentatonic, major, minor, other modes;
perception of conjunct and disjunct pitch sequence;
perception of pitches as close together or widespread, e.g., stepping or skipping within a major scale;

Kindergarten
perception of pitch sequences as moving up, down, or staying the same;
perception of pitches as high or low in relation to one another

II. Rhythm

N.B. READ THIS PAGE FROM BOTTOM TO TOP

Grade 9
recognition of the unusual notation of rhythm, e.g., time modules in Haabenstock-Ramati’s Liasons;
recognition of the lack of steady pulse in a piece of music

Grade 8
recognition and use of notation of complex meters and poly-meter

Grade 7
recognition and use of augmentation and diminution

Grade 6
recognition and use of terms: allegro, andante, lento, moderato, largo, presto, vivace, allegretto, ritard, accelerando;
recognition and use of changing meter;
recognition of the relation of tempo to form

Grade 5
recognition and use of syncopation;
recognition and use of tied notes;
recognition and use of compound meters;

Grade 4
recognition and use of three to one relationships in note values, e.g., dotted whole to half note; dotted half to quarter note; dotted quarter to eighth note; dotted eighth to sixteenth note;
recognition and use of sixteenth notes

Primary 3
recognition and use of simple meter;
recognition of the relation of measures to meter signatures;
recognition that the durational pattern of the notes can be different from the beat but is related to the beat or other durational module;
recognition of the function of bar lines and measures

Primary 2
recognition of the function of the beat or other time module in measuring the duration of sounds;
recognition that sounds in music may move with the pulse, faster than the pulse or slower than the pulse;
recognition of beats grouped by twos, threes, or fours

Primary 1
perception of the relation of tempo to description and expression;
recognition and use of two to one relationships in note values, e.g., whole to half, half to quarter, quarter to eighth;
recognition of notes: half, whole, quarter, eighth and corresponding rests

Kindergarten
perception of the difference between the pattern of sounds and the beat;
recognition of accents and their function of grouping pulses;
perception and feeling of a steady pulse;
perception and feeling of three to one relationships (Compound meters);
perception and feeling of two to one relationships (Simple meters);
perception of sounds as long or short in relation to one another;
perception and reproduction of the rhythm patterns of words;
perception of tempo: fast, slow, or in between

III. Media

N.B. READ THIS PAGE FROM BOTTOM TO TOP

Grade 9
recognition that the manner of playing instruments affects the sound: staccato, legato, portando, glissando, marcato
recognition of unusual instruments, newly invented ones, e.g., those of Harry Partch
Grade 8  recognition of instruments of non-European origin
        * * *
Grade 7  recognition of ancient instruments
        * * *
Grade 6  recognition of other vocal or instrumental ensembles and
        qualities of solo voices: soprano, contralto, tenor, baritone,
        bass
        recognition of vocal and instrumental ensembles: women's
        chorus, men's chorus; vocal quartet, trio, duet; string
        quartet, woodwind quintet; various instrumental trios
        * * *
Grade 5  recognition and manipulation of electronic sound sources
        recognition of the change in timbre related to dynamic
        change
        * * *
Grade 4  aural and visual recognition of Latin American instruments,
        folk and informal instruments
        recognition of lesser known symphonic instruments
        recognition that the timbre of a sound is affected by how the
        sound making material is activated, e.g., blowing, striking,
        plucking, bowing, rubbing, scraping
        * * *
Primary 3 recognition of symphonic instruments by families: strings,
        woodwinds, brasses, percussion
        aural and visual recognition of oboe, bassoon, viola, cello,
        and bass, trombone, French horn, and tuba, and various
        percussion instruments
        * * *
Primary 2 aural recognition of the difference between men's and women's
        voices
        recognition of vocal and instrumental ensembles: chorus,
        band, orchestra
        recognition that the timbre of sound is affected by the people
        who produce the sound
        * * *
Primary 1 aural and visual recognition of keyboard instruments: organ
        and piano
        aural and visual recognition of symphonic instruments:
        violin, flute, clarinet, trumpet, drums
        * * *
Kindergarten recognition and use of sound made by wood, metal, and skin
        or plastic
        recognition that the size of a sound maker affects its pitch:
        large instruments generally make low sounds: small things
        generally make high sounds
        recognition of the relation of timbre to expression and
description
        * * *

aural and visual recognition of common classroom instruments: autoharp,
percussion instruments, etc.
recognition of own vocal production: singing as distinct from speaking
recognition and manipulation of environmental sound sources
perception and discrimination of two or more sounds as the same or different

IV. Dynamic Level

N.B. READ THIS PAGE FROM BOTTOM TO TOP

Grade 8 exposure to dynamics in graphic notation: size, intensity or
        color, and thickness of symbols as indications of dynamics
        * * *
Grade 7 recognition of the relation of dynamics to relative consonance
        and dissonance
        * * *
Grade 5 recognition of the relation of dynamics to melodic contour
        recognition of the relation of dynamics to tempo
        * * *
Grade 4 recognition and use of piano (p), forte (f), crescendo, decre-
        scendo, mezzoforte, mezzopiano, pianissimo, fortissimo
        * * *
Primary 1 recognition of the use of dynamics for expression and
        description
        * * *
Kindergarten recognition and use of loud, soft, and degrees between;
        sudden change; gradual change

V. Simultaneity

N.B. READ THIS PAGE FROM BOTTOM TO TOP

Grade 9 recognition of unrestricted simultaneities: electronic sounds,
        aleatoric sounds, clustered pitches;
        * * *
Grade 8 recognition of the stacking of staves in vocal and instru-
        mental score with vertical alignment of notes indicating simul-
        taneity;
        recognition of key relationships: relation of a specific chord
to various tonal centers;
        recognition of harmonic rhythm
        * * *
Grade 7 recognition that simultaneity may be primarily vertical or primarily linear (horizontal) or a combination of both: homophony, polyphony, amphony; recognition of the relativity of the terms consonance and dissonance; recognition and manipulation of simultaneities in whole tone and twelve tone systems.

Grade 6 recognition of consonance in tonal harmony as simultaneities that rest and do not require resolution; recognition of dissonance in tonal harmony as simultaneities that do not rest and do require resolution; recognition of the relation to "fa" to the tonic chord in minor; recognition and use of chord progressions: i, V.

Grade 5 recognition of chord progressions: I, V; recognition of chord structure as stacked intervals; recognition of the relation of "do" to the tonic chord in major.

Grade 4 recognition of intervals: thirds, fourths, fifths, octaves, seconds, sixths, sevenths in relation to sol-fa syllables.

Primary 3 recognition and use of chordal accompaniment; block chords, repeated chords, broken chords.

Primary 2 recognition and use of canon; recognition of the stacking of notes as an indication of simultaneity.

Primary 1 recognition that texture thickens as the number of simultaneities increases and thins as the number decreases.

Kindergarten perception and use of unrestricted dissonance; perception and use of restricted dissonance and consonance.

VI. Form

N.B. READ THIS PAGE FROM BOTTOM TO TOP

Grade 9 recognition of unconventional forms.

Grade 8 recognition of through-composed forms.

Grade 7 recognition of contrapuntal forms: fugue, chaconne, passacaglia; recognition of formal devices of fugue and antiphon; recognition of the influence of texture on form.

Grade 6 recognition of variations, rondo, sonata allegro; recognition of themes and their function.

Grade 5 recognition of the principles or unity and variety in large forms.

Grade 4 recognition of the influence of media on form: symphony, concerto, sonata, opera, oratorio.

Primary 3 recognition of binary and ternary forms.

Primary 2 recognition of cadence, introduction, and coda.

Primary 1 recognition of phrases; recognition of repetition, contrast, and variation.

Kindergarten manipulation of ostinato and echo; recognition of sounds as the same or different in relation to each other.


Only material considered suitable for inclusion in a K-6 curriculum is listed. Some aspects of the entire subject matter of music are necessarily omitted.
A STUDY OF MUSICAL ACHIEVEMENT OF CHILDREN IN AN ECONOMICALLY DEPRESSED AREA

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STATEMENT OF PROBLEM

The purpose of the study was to investigate the musical achievement of children living in an economically depressed, inner-city area in the eastern part of the United States. Scores were then compared with those of children in economically depressed and advantaged areas of midwestern cities, as reported in a previous study by Hill. Children living in Hoboken, New Jersey, were selected for the eastern city sample. A summer cultural arts program was being planned for these children. Musical achievement test scores were of use in planning appropriate musical activities for the summer program. Some study was also made of environmental factors effecting these scores.

ORIGIN OF THE PROBLEM

Hill’s study indicated a relationship between deprived environmental conditions and deficiencies in musical achievement. It was of interest to compare the test scores of children in Hoboken with those of children from deprived and advantaged homes in cities in the midwest where Hill collected data. Hill stated that

It may well be that the acquisition of musical skills is also the result of an enculturative process which begins early in life, well before school age; that such necessary skills as pitch perception, tonal memory, rhythmic comprehension, and even aesthetic value systems begin their implantation, before the implementation of formal school training.

Music, as a form of behavior, must be learned. To be musically capable, a child must learn the skills necessary for musical performance. These skills may be identified, measured and described for various age groups within a culture. In this study, the musical skills of children in Hoboken, New Jersey, were studied so the most appropriate summer music activities could be planned.

The summer cultural arts program for children in Hoboken was a co-operative effort of several agencies. However, most of the funds were from Model Cities and the New Jersey Council of the Arts. Activities in art, music, dance, photography, drama, and sports were included. The primary goal was to provide supervised recreational activities for the children. However, attempts were made to choose activities that would have educational value and offer enrichment in areas that were not available in the school program. Therefore, the musical achievement tests were administered to describe existing levels of musical achievement and to identify skills that existed as well as areas where deficiencies were apparent. This information provided a basis for comparison of scores from this population with those from children tested by Hill. The information also led to a more successful design of a summer music program than would have been possible without some objective measurement of existing skills.

RELATED LITERATURE

The study that was most related to this project was by Hill. He studied the musical achievement of advantaged and disadvantaged children in kindergarten and first grade, and fourth, fifth, and sixth grades. Hill found that “a relationship between deprived environmental conditions and deficiencies in musical achievement seems established.” At all grade levels tested, the advantaged children scored significantly higher than the disadvantaged children. This study provided data for comparison with scores from children in Hoboken.

Wheeler and Wheeler were among the first to study musical ability of deprived children, with the implication that environmental factors were related to the test scores. They used the Seashore Tests to compare musical talent of mountain children with a number of other groups which had also been tested with the Seashore Tests. The mountain children were from Tennessee and in grades five through eight. The mountain children scored below the norms for the Seashore Tests. Their scores were particularly low on tests of pitch and tonal memory. However, when compared to other groups which might also be considered disadvantaged (children from city slums, Indian reservations, etc.) they scored somewhat higher.

In reviewing the literature on areas in which a disadvantaged childhood seems related to achievement, the following concepts seem to be formulated: 1) a lowered I.Q., sometimes severe enough to indicate retardation, is found among many children in disadvantaged areas; 2) poor self-concept seems to lead to expectations of failure and affects motivation to be involved in school; 3) low academic achievement is particularly evident in reading, language usage, and subjects requiring careful listening; 4) although disadvantaged children may be as creative as advantaged children while they are young, a decrease in creative ability is evident if this ability is not encouraged in school; 5) many disadvantaged children have emotional problems related to the insecurity in a home where all members are affected by acculturation difficulties. Since achievement in music is related to all of these factors, it seems likely that disadvantaged children would score lower than advantaged children on tests of musical achievement. Additional factors which would support this hypothesis are that these children hear very little music at home, are not taken to concerts, and may attend schools where little music education is available.

PROCEDURE

Testing Procedure

The Primary Music Skills Test, compiled by Hill, was given to children in kindergarten and first grade; the Gordon Musical Achievement Profile was given to children in the fourth, fifth, and sixth grades. The Primary Music Skills Test consists of 36 items, partitioned into subsections:

82

83
1. Interval Matching (five-note interval combinations)
2. Unknown Phrase Imitation (three, four, five, six and seven note phrases)
3. Tone Matching (10 single tones)
4. Song Phrase Performance (eight bars each of three familiar children’s songs)
5. Tap Recognition (involving recognition of three familiar song rhythms as clapped)
6. Tap Imitation (ten rhythms of increasing length and complexity)

Each child was tested individually and a maximum time of 15 minutes was allowed for each test.

The Gordon Musical Achievement Profile measures the child’s ability to relate what he hears to what he sees in the test booklet. There are three subsections: Melodic, Rhythmic, and Harmonic. Each section has 46 items. The child must determine whether the taped example is like item one or item two in the booklet, or if it is not given in the booklet. This test can be given to groups of children, rather than individually. Forty-five minutes are required to administer this test.

Subjects
The tests were given to children in the Hoboken Public Schools that were designated as Model Cities Schools. Since the tests for kindergarten and first grade had to be given individually, there was not enough time to test all of the children in those grades. A random sample of 28 children in each grade was selected.

Since data from this study was to be compared with that by Hill, it was important to select Ss by similar criteria. In Hill’s study, the sample included 757 children from three large midwestern cities. The children represented two groups:

1. Deprived: children from homes where the income did not exceed $3,000 per year and where the parent was on some kind of relief roll. Half of this group was from homes where there was never more than one parent present or broken homes.

2. Advantaged: children from homes with an income of $7,000 to $25,000 per year. Only 10% were from broken homes.

It was possible to compare data by randomly selecting scores from the total sample. The total sample included children that would be representative of Hill’s deprived and advantaged groups. According to the Hoboken Model Cities Comprehensive plan, there are 1440 households with an income of under $5,000 and 4975 households with an income of $7,000 or more. The "median reported household income for the community is under $5,000."

Facilities and Equipment
Since the Hoboken school children did not begin summer vacation until June 19, it was possible to collect the data before school was out. In kindergarten and first grade, the child’s responses were taped on a Sony stereo cassette recorder (solid state TC-130) for later scoring. Responses were in the form of an "echo" game, with the examiner singing the pitches and playing them on song bells (bells were used in Hill’s study rather than piano because they were portable and testing was possible in any available room that was fairly quiet). The Gordon Musical Achievement Profile was on tape, so a tape recorder, pencils, and test booklets were the only materials needed. (A Sony 230 tape recorder was used to play the tape).

PRESENTATION OF DATA
Comparison of Musical Achievement Scores of Groups Within Hoboken Kindergarten and First Grade. Composite scores as well as scores from the six subsections of the Primary Music Skills Test were considered in comparison. An Analysis of Variance was made to determine whether differences were statistically significant .05 level of confidence was used.

There were no significant differences between kindergarten and first grade musical achievement scores. The means were generally higher for first graders, which may indicate a slight gain due to maturation. Since there were no music classes in the elementary schools this increase cannot be explained by training. However, the increase was not large enough to produce a statistically significant difference.

There were statistically significant differences between advantaged and disadvantaged groups in the kindergarten and first grade where scores were combined. The advantaged children scored higher on all subtests, but the difference was significant (.01 level) on scores that indicate ability to sing an interval, phrase and single tone. The composite score was also significantly higher (.01 level).

Fourth, Fifth and Sixth Grade
The fourth, fifth, and sixth grades were tested with the Gordon Musical Achievement Profile. Three subtest scores, as well as the composite scores, were considered in comparisons between groups.

In the first comparison, all musical achievement scores from the fourth, fifth, and sixth grade children were computed for the three subtests and the composite scores. The mean scores on all subtests and the composite score means were higher as the children get older. Fifth graders scored higher than fourth; sixth graders scored higher than fifth. However, differences in rhythmic scores were not statistically different, although they show the same trend. Differences in scores for Melodic and Harmonic subtests as well as for Composite scores were statistically significant at the .01 level.

For the Melodic variable, the t ratios following the analysis of variance indicated that there was no difference between the fourth and fifth grades (t = .21), a significant difference between the fourth and sixth grades (t = 3.31), and a significant difference between the fifth and sixth grades (t = 3.54).
On the Harmonic variable, a significant difference was found between the fourth and sixth grades (t = 3.60) and between the fourth and fifth grades (t = 2.13). The latter would be significant only at the .05 level. On the composite scores all differences comparing fourth with fifth, fourth with sixth, and fifth with sixth were significant at the .05 level. Only the fourth with the sixth comparison was significant at the .01 level.

Although the advantaged children scored somewhat higher than the disadvantaged, differences were not statistically significant.

Comparisons of Musical Achievement Scores of Children in Hoboken With Children in Cities in the Midwest

Since similar data was collected by Hill, it was possible to compare groups from Hoboken with groups from the Midwest. In order to compute the standard error of the mean for the Hoboken sample was computed. Then, a one-sample technique was used to test the hypothesis that the mean for the Hill study would not deviate more than 1.96 standard errors of the Hoboken sample at the .05 level, or more than 2.58 standard errors of the mean from the Hoboken sample at the .01 level of significance.

| TABLE I
| COMPARISON OF HOBOKEN CHILDREN WITH SCORES OF CHILDREN FROM THE MIDWEST |
|---------------------------------|---------------------|---------------------|
| Variable | Kindergarten | First Grade |
|          | Hoboken      | Midwest      | Hoboken      | Midwest      |
|          | Mean  SEm    | Mean  SEm    | Mean  SEm    | Mean  SEm    |
| I       |             |              |              |              |
| Advantaged | 13.14 1.61 | 9.00*       | 13.71 1.91 | 11.58 8.62 |
| Disadvantaged | 6.86 1.60 | 7.17        | 8.14 1.91 | 8.52 8.26 |
| P       |             |              |              |              |
| Advantaged | 58.57 6.00 | 37.06*      | 59.64 5.32 | 50.06 4.13 |
| Disadvantaged | 30.71 7.77 | 27.96       | 36.36 7.20 | 41.08 4.28 |
| M       |             |              |              |              |
| Advantaged | 16.36 2.55 | 12.85       | 15.86 2.96 | 14.60 10.00*|
| Disadvantaged | 7.79 2.16 | 8.28        | 5.14 1.93 | 10.00* 10.00*|
| S       |             |              |              |              |
| Advantaged | 9.50 1.13 | 9.11        | 11.71 1.14 | 11.26 9.68 |
| Disadvantaged | 9.50 0.76 | 7.15*       | 9.00 1.04 | 9.68 1.04 |
| TR      |             |              |              |              |
| Advantaged | 8.21 1.45 | 4.42*       | 9.42 0.91 | 4.30** 4.30**|
| Disadvantaged | 8.21 1.24 | 2.55**      | 7.50 1.26 | 4.42** 4.42**|
| TI      |             |              |              |              |
| Advantaged | 21.64 2.08 | 14.02**     | 26.00 1.22 | 17.17** 17.17**|
| Disadvantaged | 21.21 1.90 | 11.70**     | 22.14 1.30 | 14.51** 14.51**|

* Significant at .05 level
** Significant at .01 level
I = Interval Matching
P = Unfamiliar Phrase Repetition
M = Tone Matching
S = Familiar Song Repetition
TR = Tap Recognition
TI = Tap Imitation
C = Composite Score

Table I indicates that the Hoboken advantaged kindergarten children scored significantly higher than the Midwest sample on four of the six subtests. One of the four (Tap Imitation) was significant at the .01 level, and three (Interval Matching, Unfamiliar Phrase Repetition, and Tap Recognition) were significant at the .05 level.

The disadvantaged kindergarten sample in Hoboken scored higher than the Midwest sample on 1) Familiar Song Repetition (.05), 2) Tap Recognition (.01), and 3) Tap Imitation (.01).

The first grade advantaged sample in Hoboken scored higher than the Midwest first grade sample on Tap Recognition (.01) and Tap Imitation (.01). The disadvantaged sample in Hoboken also scored higher than the disadvantaged Midwest sample on these two measures, but the difference for Tap Recognition was only significant at the .05 level.

The only subtest that indicated a statistically significant difference in favor of the Midwest sample was for disadvantaged first graders on the Tone Matching subtest (.01).

Advantaged fourth, fifth, and sixth grade children in the Midwest sample scored higher than advantaged fourth, fifth, and sixth grade children in the Hoboken sample (.01 level of significance for all subtests and composite scores). There was no difference between the two disadvantaged samples except on the melodic subtest in grade four, where the Hoboken group scored higher than the Midwest group (.05 level). Since no differences were found between the advantaged and disadvantaged samples from Hoboken, it appears that both groups obtained musical achievement scores similar to those of the disadvantaged Midwest samples.

CONCLUSIONS

Scores from the kindergarten and first grade samples in Hoboken indicate that these children have as much ability and even higher achievement than children in Midwest samples. However, by grades four, five and six, Hoboken children appear to be musically achieving much like disadvantaged children in the Midwest. This might be attributed to environmental factors and to the lack of music education in the elementary schools in Hoboken at the time of the study.

Observations during the summer music program that followed the Hoboken study indicated that these children were very eager to learn music and could benefit from a structured summer learning experience in music. Since the test scores indicated that they had the same deficit in musical achievement that was noted in the Midwest disadvantaged sample, a similar "remedial" music program would likely be of benefit to inner-city children in Midwest cities.

REFERENCES


FOOTNOTES
2 Ibid, p. 77
3 Hill, op. cit.
4 Hill, op. cit., p. 83
6 Hill, op. cit.
9 Ibid, p. 11

THE DERIVATION AND EARLY HISTORY OF THE SAXOPHONE

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It is often said that the saxophone is historically unique among wind instruments in that it came to us as an invention, launched fully grown on the field of music. Yet, while this is true, it would be an oversight to conclude that the saxophone was invented independently from earlier developments in wind instrument making.

Musical instruments come into existence as dictated by the demands of musicians and their music calling for them and also by the ability of the art of instrument making having advanced to the point where it has the technical resources to fabricate the instruments. The body of thought contained in the concept of wind instruments is somewhat analogous to a mountain lake: each represents a potential which awaits utilization. The passage of time brings rainfall to the mountains and an ever-increasing number of ideas to our accumulation of thought. As nature utilizes the lake to produce rivers, man elicits wind instruments from his pool of ideas. The rivers from the mountain lake sometimes terminate into lakes of their own; but as more rain falls in the mountains, these initial lakes, which were once ends in themselves, become passageways for the water that will form newer lakes. And, as all of this takes place, it is ripening a stage of readiness for the future lakes which lie downstream.

Such is the case of the saxophone. It had to be content to meander its way through the development of non-saxophone ancestral instruments, to have its principal characteristics alluded to, to wait until the answer to "What are we looking for?" had solidified to the point where the instrument would be recognized when it was discovered, and to endure in the subconscious of musical thought until the art of wind instrument making had reached the sophisticated level necessary for the production of saxophones. Having withstood all this, the saxophone was finally invented.

Invention and Description of the Saxophone Family
The exact manner in which Adolphe Sax (1814-1894) came to invent the saxophone is a point that modern historians can only speculate about for no account of it was recorded.

One often cited possibility is that it was discovered while Sax was experimenting with clarinet, hoping to produce one that would overwhelm an octave. This seems rather unlikely because Sax was too experienced with clarinet to have thought a conical bore instrument would produce a clarinet tone. In addition, if a clarinet could be made to overwhelm an octave, its range would be greatly reduced in comparison to standard clarinets, which overwhelm a twelfth. It has also been suggested that the saxophone began as an ophicleide fitted with a clarinet mouthpiece. The keywork and shape of the ophicleide were not the same as those of the saxophone, and the clarinet mouthpiece is not acoustically the same as the saxophone's. Consequently, the combination of an ophicleide and clarinet mouthpiece would not produce a saxophone. It is quite possible, however, that such a combination occurred to Sax and did serve as his inspiration to develop the saxophone.

The invention of the saxophone, in 1840, was noteworthy in the history of wind instruments for it was the first successful combination of a single-reed mouthpiece and conical bored tube, as well as the first generally accepted woodwind with a metal body. Metal had been previously tried on all the woodwinds with the exception of the oboe, and in each instance wood remained the favored material. The closest competitor to the saxophone in regards to the use of metal is the Boehm flute, introduced in 1847.

The first member of the saxophone family to be built was not the alto or tenor, as might be expected, but rather one of the low ones, either the B-flat bass or the E-flat contrabass. Some sources maintain that the first saxophone was a bass instrument pitched in B-flat, which is quite clearly our standard bass saxophone in B-flat. Other historians feel that the distinction belongs to the E-flat baritone. They draw their support from an article which Berlioz wrote in his column in the Journal des Debats in Paris on June 12, 1842; which is regarded as the saxophone's "birth certificate" since it introduced the new instrument. According to Berlioz, it was a bass instrument with a three-octave range, beginning with the B-flat under the bass staff. Such a compass suggests an early version of the baritone.
Sax was aware of the importance of completing his new instrument with a mouthpiece that would, by its design, facilitate the production of a tone with the particular timbre he wanted. While his saxophone mouthpiece was similar in principle to that of the clarinet, the two differed internally and externally. In general, his mouthpieces for all the members of the saxophone family were shorter and wider than clarinet mouthpieces. The width of the tone chamber was greater than the diameter of the instrument's bore at the point where the two were connected, and its walls were rounded to a barrel-like shape to assist in imparting a mellow tone. The reed he selected was also wider than the one used on the clarinet.

Sax had recently found a method by which he could plate a clarinet mouthpiece with metal so that the problems created by warping and absorption of moisture could be minimized. However, he chose not to use this method on his saxophone mouthpiece probably, at least in some part, due to the brilliance it added to the clarinet's tone.

The Berlioz article described the saxophone's value as a musical instrument as well as its physical appearance.

The Saxophone . . . is a brass instrument with nineteen keys, whose shape is rather similar to that of the ophicleide. . . . Its sound is of such rare quality that, to my knowledge, there is not a bass instrument in use nowadays that could be compared to the Saxophone. . . . Naturally, this instrument will never be suitable for rapid passages, for complicated arpeggios: but the bass instruments are not destined to execute light evolutions. Instead of complaining, we must rejoice that it is impossible to misuse the Saxophone and thus to destroy its majestic nature by forcing it to render mere musical futilties.

It has been suggested that Berlioz' comment about the saxophone not being suited to rapid passages may have served as Sax's inspiration to produce the higher, more agile, saxophones.

Berlioz continued to praise the saxophone in his Treatise on Modern Instrumentation and Orchestration.

These new voices given to the orchestra possess most rare and precious qualities. Soft and penetrating in the higher parts, full and rich in the lower part, their medium has something profoundly expressive. It is, in short, a quality of tone sui generis, presenting vague analogies with the sounds of the violoncello, of the clarinet and cornet inglesse, and invested with a brazen tinge which imparts a particular accent. The body of the instrument is a parabolic cone of brass . . . . Agile, fitted for the execution of passages of a certain rapidity—almost as much so for cantilina passages—the saxophone may figure with great advantage in all kinds of music; but especially in slow and soft pieces.

The patent letter for the family of saxophones was submitted on March 20, 1846, and several months later, on June 25, Sax was granted a fifteen-year patent. The family was composed of two groups, each having seven members from high soprano to contrabass. At the time of patenting, however, some of the instruments were only proposed and had not yet been constructed. Sax intended one group, whose members were pitched alternately in E-flat and B-flat, for use in military bands and wind ensembles, and the other group, pitched in F and C, for orchestral use. In 1848, Georges Kastner recorded the instruments of the saxophone family as:

**Band group (B-flat and E-flat)**  
- soprano in E-flat  
- soprano in B-flat  
- alto in E-flat  
- tenor in B-flat  
- Baritone in E-flat  
- bass in B-flat  
- contrabass in E-flat

**Orchestra group (C and F)**  
- soprano in F  
- soprano in C  
- bass in C  
- contrabass in F

The three missing members were added at a later date. With all these instruments to choose from, only the soprano through bass of the band group are regarded as the standard saxophones in use today.

It is curious to note that the "tobacco pipe" shape commonly associated with the saxophone was not used on the largest and smallest of the original instruments which Sax patented. The smallest ones were straight and the largest instruments were shaped more like ophicleides, with their bells straight, not curved.

'As might be expected, Sax was the first to improve the saxophone after it had been patented. The very highest tones were weak and uncertain in performance, so he consequently reduced the compass of his instruments from three octaves to two octaves and six semitones. In 1887, the bell of the saxophone was lengthened so that the key for an additional semitone could be provided, resulting in a range of two and a half octaves, from B-flat to F, which still remains as the standard saxophone compass.

The first saxophones had two separate speaker holes, each controlled by its own key. It was not until around 1890 that the double automatic octave key, standard on modern instruments, was introduced. This innovation allowed the performer to employ a single touchpiece, which, owing to its mechanism, opened the appropriate speaker hole for the pitch being played. Both Heckel and Lecomte claim to have invented it.

Numerous other improvements were made by instrument makers, mainly in France, during the second half of the century, many times in the area of key mechanisms. Some changes the saxophone underwent were perhaps more detrimental than beneficial, however. Widening of the bore and modifications to the mouthpiece have changed the saxophone's tone quality and, some experts feel, have resulted in an instrument that deviates considerably from what its inventor had intended it to be, and has lost its woodwind character. By comparison, old saxophones often sound mated and less brilliant than our "modern" saxophones.
On occasion, special order saxophones have been built by the large instrument companies. In the 1920's, Selmer produced a saxophone for the Argentine soloist, Texiero de Laderio, that was capable of four chromatic octaves up from a low A-flat. The top tones were produced by the means of harmonics from special fingerings, with the aid of an additional speaker key. A few years before the Selmer instrument, the French maker, Couesnon, made a three octave saxophone from low G on the design of Dupquier, soloist with the Garde Républicaine.\textsuperscript{15}

The lowest saxophones are truly large, as Anthony Baines depicts,

Callers at Buffet's shop in Paris will remember the giant contrabass saxophone standing in the corner of the showroom, with its colossal mouthpiece and tattered reed on which generations of visitors have had a respectful and unproductive blow.\textsuperscript{16}

Considering the problems in playing such an instrument, it is difficult to imagine why an even larger saxophone would be built, but for whatever their reasons, Conn, at one time, had made a sub-contrabass saxophone in B-flat, twice as large as the standard bass saxophone.\textsuperscript{17}

Saxophone Acoustics

Because it combines features borrowed from other woodwinds, the saxophone is a musical hybrid with its own unique acoustical character. Although it may be individual, it can still be explained by the same principles that apply to wind instruments in general.

The particular harmonics that can be produced on a woodwind are determined by two traits in its design: the type of tube it has, either conical or cylindrical, and whether the tone generating mechanism has the effect of opening or closing the tube.

In regards to the type of tube, a glance at the harmonic series of the various woodwinds illustrates that the conical tube is more suited to giving rise to a full set of overtones than is the cylindrical, for regardless of the type of tone generator, each conical bored instrument produces both odd and even partials, whereas only one of the two cylindrical instruments does. And, since the significant physical difference, with regards to acoustics, between the two cylindrical instruments, flute and clarinet, lies in the tone generator, it can be concluded that in cylindrical bored instruments the mouthpiece determines which partials will be produced.

The vibrations of air columns in wind instruments are not transverse as in the strings, but compressional, running lengthwise in the instrument. As the tone is begun, pulsations are emitted which travel from the mouthpiece and reach the bell, where part of their energy passes out of the instrument and completes its wave length in the outside air, but the remainder is bounced back as a compression.\textsuperscript{18} When these compressions reach the mouthpiece, they are either stopped, and do not continue the back-and-forth motion with the neighboring air particles, or are allowed to continue, depending on to what degree the mouthpiece closes that end of the tube.\textsuperscript{19}

If the compressions are stopped, a node, or point of little or no motion, is formed. If they are allowed to continue, then a loop, or point of maximum motion, is the result, like the one near the bell of the instrument. As a result of the several combinations of conical and cylindrical tubes and tone generating mechanisms, the woodwinds each fall into one of the two categories—open or stopped pipes. The instruments are commonly assigned to their appropriate category not from determining where their loops and nodes appear, but rather by what effect the arrangement of their loops and nodes has when the instrument is overblown. More simply stated, those instruments which can overblow an octave are called open pipes, and the remaining ones, which overblow a twelfth, are stopped pipes.

The saxophone is considered an open pipe, and its harmonic series can be taken as typical of the category. When a fundamental is played on the saxophone, a central node appears,

\begin{center}
\[
\begin{array}{cccccccc}
0 & 1 & 2 & 3 & 4 & 5 & 6
\end{array}
\]
\end{center}

Like the other typical open pipes, it has a loop at each end, and the wave length of the fundamental is the same as the length of the tube. When the first harmonic, or second partial is sounded, it is the result of having divided the wave length in half;

\begin{center}
\[
\begin{array}{cccccccc}
0 & 1 & 2 & 3 & 4 & 5 & 6
\end{array}
\]
\end{center}

Similarly, the second harmonic, or third partial, divides the wave length in thirds;

\begin{center}
\[
\begin{array}{cccccccc}
0 & 1 & 2 & 3 & 4 & 5 & 6
\end{array}
\]
\end{center}

This pattern continues for the remaining harmonics.

A significant outcome from the length of an open pipe equaling the wave length of its fundamental is that the air column inside the tube, representing a complete wave length, can be divided so as to theoretically allow the instrument to sound any of the overtones in the harmonic series of the fundamental. This is not possible with closed tube instruments such as the clarinet.

Closed tube instruments always have a node at the stopped end, and a loop at the other, in keeping with this observation, the fundamental of a
clarinet would be quite different from that of the saxophone;

\[
\begin{array}{ccccccc}
0 & 1 & 2 & 3 & 4 & 5 & 6 \\
\end{array}
\]

Since a stepped tube contains only half of its wave length, its fundamental would sound an octave lower than that of an open tube of the same length.

The second partial will not sound in the stopped pipe instruments because the division of its wave length required to produce the octave would eliminate either the node at the closed end;

\[
\begin{array}{ccccccc}
0 & 1 & 2 & 3 & 4 & 5 & 6 \\
\end{array}
\]
or the loop at the bell, which the instrument cannot do;

\[
\begin{array}{ccccccc}
0 & 1 & 2 & 3 & 4 & 5 & 6 \\
\end{array}
\]

This applies to the higher even-numbered partials as well.

The saxophone and clarinet mouthpieces are basically the same, and it is often wondered why on one instrument they produce the characteristics of an open pipe, and on the other, a closed pipe. Part of the answer is that when both instruments are sounding the same pitch the clarinet reed stays against the mouthpiece slightly longer than the saxophone reed does, thus rendering it closed more of the time.\(^2\) It can also be attributed to the fact, previously mentioned, that a cylindrical bore tends to dampen the even numbered partials.

When the air column inside an instrument is in motion, the partials within that column which the instrument is capable of producing, are also in motion, sounding their own pitches. The number and relative strength of those harmonics present determines the instrument's tone quality. The quality of the saxophone's tone is the result of a large number of well-balanced harmonics, and they are ranked according to strength in the following order: 1, 2, 4, 3, 5, 9, 12, 8, 6 and 11, 7, and 10.\(^2\)

Though it may be richly endowed with harmonics, the tone of the saxophone is difficult to control due to its extreme conical bore, which offers little resistance to the performer's wind.

**USE AND ADOPTION OF THE SAXOPHONE**

France

The first use of the saxophone in a public performance was in Paris, as might be expected, on February 3, 1844. The concert in which the saxophone made its debut was organized and conducted by Berlioz, in hopes that it would encourage support for Sax, still in the process of establishing himself in Paris. There were only two numbers on the program. One was the Roman Carnival overture, being performed for the first time, and the other was a transcription by Berlioz of an excerpt from one of his earlier works. The excerpt was a "religious meditation" from Tristia, composed in 1831, originally for six voices, but now transcribed for the same number of new Sax instruments: a high B-flat trumpet, a cornet, a bugle, a clarinet, a bass clarinet, and a saxophone, played by Sax.\(^2\)

According to Oscar Cometti's biography of Sax, the concert was a genuine triumph for the saxophone and its inventor, though circumstances surrounding the victory were unexpected. On the day of the concert, Sax was not quite finished assembling the instrument he intended to use, and was forced to piece it together as best he could with string and sealing wax. Berlioz had arranged the transcription so that after a loud tutti section, each of the instruments had a solo passage, with the saxophone's being at the very end of the piece. As Sax neared the end of the solo, his memory failed him and he forgot the fingering of one of the notes. Instead of stopping, he held out the preceding note, swelling and diminishing it, to give himself time to find his way through the maze of string and wax and remember the fingering. Just before his breath was gone, he remembered the fingering and finished the passage. The audience was enthusiastic over what they thought was "... a bold and happy instrumental inspiration..." and applauded vigorously.\(^2\)

The first original orchestral composition to include a saxophone part was written by Georges Kastner (1802-1872). The work was a biblical opera entitled Le dernier Roi de Juda and was performed at the Paris Conservatoire on December 1, 1844. The saxophone he wrote for was that first member of the family that Sax built — the bass instrument.\(^2\)

In the 1840's, the classic balance between the woodwinds and brasses in the military band had been upset by the increased use of the new chromatic brass instruments. It was hoped by many that the saxophone, with its powerful tone and timbre somewhat midway between the woodwinds and brasses, would help to establish a new balance. France was the first country to adopt the saxophone in its military bands, around 1846. It was very warmly received and used to such extent that it all but replaced the clarinet and other woodwinds, and became the foundation non-brass of the band.\(^2\)

Soon after Berlioz learned about the saxophone and became interested in it, he realized that if it was to be played with artistry, worthwhile instruction must be made available to interested students. In 1846, he sent a letter to a friend in which he wrote,

The saxophone, as a new member of the clarinet family, and really of value when the performer can bring out its characteristics, ought nowadays to have a separate place in Conservatoire classes, for the time is not far distant when every composer will wish to employ it.\(^2\)
One year later, he announced in his column in the Journal that saxophone instruction had begun in the Gymnase Musical. 27

Many fine French composers have included parts for saxophones in their scores. Among these composers are Georges Bizet, Ernest Guiraud, Jules Massenet, Leo Delibes, Gustave C的事实, Vincent d'Indy, Maurice Ravel, Darius Milhaud, Jacques Ibert, Ambroise Thomas, Camille Saint-Saens, and Jacques Halevy.

Rossini was also a friend of Sax and very fond of the saxophone, calling it "... the finest blending of sound I have met with." When he died in Paris, on November 13, 1868, the last prayer for the final absolution was recited above a special arrangement of Beethoven's funeral march, played on saxophones. 28

One Frenchman who did a great deal to introduce the saxophone to many people was Louis-Antoine Jullien. He was born in France in 1812 and lived to be only forty-eight years old. As the conductor of his own professional orchestra, he dedicated his life to bringing the best music to the common people of Europe and the United States.

Jullien was a student at the Paris Conservatoire, but unlike most students, he was showy and enterprising. When he was twenty-four years old, he became the conductor of a first-rate orchestra at the Jardin Turc in Paris. He charged only one franc for admission, and with the love of popular dance music and a flair for showmanship, the dosage of the finest music by the best composers was increased. His concerts made him the "talk of the town," but his poor financial success forced him to leave Paris and move to London. 29

Once in London, he continued the procedure of selecting the very best musicians wherever he could find them and lured the largest audiences to his concerts with low admission prices, popular music, and the never-ending showmanship that many "highbrows" criticized him for. Jullien spent the remainder of his productive life with London as his home. He instituted the Promenade Concerts as he had done in Paris, and added "Monster Concerts for the Masses," all of which earned him the honor of being the life and soul of popular orchestral music in England, and being remembered for doing more than any other conductor to bring good music to those people who had been excluded for so long. 30

Jullien was fond of the saxophone and saw to it that he had several fine soloists in his orchestra. For ten months during the years 1853-54, he brought a forty-piece orchestra from London to New York, where he augmented it with sixty local musicians, and proceeded to spark the professional band movement of the second half of the century. One of the musicians he brought with him from Europe was a superb saxophone soloist, a Belgian and friend of Sax, named E. A. Lefebre. When the orchestra went back to Europe, Lefebre stayed behind and was destined to become regarded as an outstanding virtuoso and promoter of the saxophone through his appearances with Gilmore, Sousa, and some of their rivals. 31

England

In 1844, an Englishman named Henry Distent and his four sons met Adolphe Sax in Paris and began what was to be a long and mutually beneficial relationship. The Distent were a professional brass quintet who played Sax instruments exclusively. Through their performances with Julien and others, they not only earned their livelihood, but also promoted Sax's instruments wherever they played. In 1846, Henry Distent became the sole selling agent for all Sax's instruments in England. 32

In 1848, the famous Royal Artillery Band in London adopted an alto saxophone. It was played by a young man named Henry Rigby, then only eighteen or nineteen years old. His instrument was probably made by Sax himself and procured by Distent. A few years later, the band added a tenor saxophone. Rigby was apparently a fine saxophonist, for two printed programs for concerts by the band in 1855 list him as soloist. 33

Jullien probably introduced the saxophone to more Brits than anyone else. He used them not only in his regular concerts at the Drury Lane theater, but also in his wind band that toured England in 1856. 34 Despite this early beginning, the use of saxophones in England, even today, is generally confined to a single alto and tenor.

Although the saxophone has been largely ignored by British composers, it has been used by noteworthy individuals such as Ralph Vaughan Williams in Job in 1931, William Walton in Belshazzar's Feast in 1931, and Benjamin Britten in his Sinfonia da Requiem in 1941.

Other European Countries

It is no exaggeration to say that the saxophone has never taken root in Germany. This is probably due, in general, to the German prejudice towards France and the distinction between the French and German concepts of wind instruments, and in particular to the German avoidance of the Boehm fingering system and the hostilities that existed between Sax and his German contemporaries.

Wagner himself never used the saxophone, and this is certain to have discouraged wider use of the instrument in Germany during the period in which he was so influential. He did not like Sax, either. It has been said that Wagner attributed the poor reception that Tannhaeuser received in Paris in 1851 to a number of French "peculiarities," including his having to deal with that "terrible man" Adolphe Sax. 35 Nevertheless, the alto saxophone has been used in at least one of his compositions — the third act of Tristan, for the shepherd's pipe when he signals the ship.

The best known German piece to have been originally scored to include saxophones, a quartet of them, is Richard Strauss' Domestic Symphony, composed in 1904. However, he realized the prejudice that Germans held for the instrument and also the possible difficulties that might be encountered in securing a professionally competent quartet in Germany, and so noted in the score that they could be left out, but "... only in extreme
cases of necessity." The Strauss piece is also considered the first symphonic, as contrasted to operatic, composition to include parts for saxophone.

Paul Hindemith was fond of the saxophone, however. He not only included a part for it in his opera Cardillac in 1926, but complimented it by saying "It shows a balance of unhindered technique, expressive range and directness of speech that has its equal only in the modern flute."[37]

The Italians have always liked the saxophone, especially the baritone, and Italian composers of no less stature than Verdi and Puccini have included it in their scores.

Other composers of note who have written for saxophone in orchestral compositions include Mahler, Berg, Bartok, Kodaly, Shostakovich, Prokofiev, Stravinsky, and Khatchaturian.

United States

The credit for introducing the saxophone to the United States goes to Julien and his saxophone soloist, E. A. Lefebre, who toured the country in 1853-54. However, the credit for first using it in an American band, and thus introducing it to our bands, is given to Harvey B. Dodworth. Harvey was of the third generation of a professional and military band family in the New York City area. In 1841, he inherited the leadership of the Dodworth Band in New York City. He is credited with initiating many improvements in American band instrumentation. Of interest to us here is his adopting the saxophone and bass clarinet in his own band in the 1860's. He was also one of the founders of the New York Philharmonic Orchestra.[38]

Patrick Gilmore is often cited as the man who gave the saxophone its greatest start in becoming established in American bands. His 22nd Regiment Band in New York, of the 1872 Peace Jubilee, went on a European tour in 1878. Four of its sixty-six players were saxophonists, with E. A. Lefebre on alto, who had been with him since 1872 and remained until Gilmore died in 1892.[39] His last band had a respectably well-balanced saxophone section — two B-flat sopranos, two E-flat altos, two B-flat tenors, and an E-flat baritone, and one B-flat bass.[40]

Gilmore was very demanding on his musicians, and the fact that Lefebre was soloist with him for so long is clearly a testimony to his artistry. After Gilmore's death, Lefebre and other members of the saxophone section joined Sousa's band.

John Philip Sousa was also an important figure in making the saxophone familiar to American audiences since he too made use of saxophonists as regulars in his bands and as soloists. His first Marine Band of 1880 had three saxophones within its forty-nine pieces.[41] In 1892, he resigned his position with the Marine Band and formed his first professional band. One of the members in 1892 was a man named Rudolph Becker. He was a baritone saxophone player in the band and one of Sousa's original soloists. As late as 1952, Becker was the last living member of the first band.[42] Lefebre also joined the band in 1892, and continued to serve Sousa with the same unflattering reliability and excellence that was to earn him the reputation as the supreme virtuoso on the saxophone during the period in which the professional bands flourished.

In the 1880's American instrument makers began producing saxophones. Up until that time all the saxophones used in the United States were imported from Europe. F. A. Buescher, the founder of the Buescher Instrument Company, is given the credit for making the first saxophone in this country.[43] Shortly before the turn of the century, Lefebre was employed by Conn to supervise in the production of saxophones.[44]

Sousa had several other saxophone soloists who were considered very fine musicians. Perhaps the best known was H. Benne Henton. When Strauss toured the United States, he chose Henton to play first chair in the quartet for the Domestic Symphony.[45] Many people considered Henton the finest of the saxophonists from the professional band era, next to Lefebre. Two of Sousa's later saxophone soloists were Jean Moeremans, followed by Ben Vereeken.[46]

American composers such as John Carpenter, Aaron Copeland, Ferde Grofe, George Gershwin, Percy Grainger, Virgil Thomson, Morton Gould, Charles Ives, and Roy Harris have all written orchestral works to include saxophone parts.

To many people the saxophone means jazz. And, to many musicians, the saxophone means musical insensitivity. Neither supposition is correct, however, for they each find their origin in the ignorance afforded by a biased and confined exposure to the saxophone.

Tom Brown, a black jazz musician from Chicago, did much to popularize the saxophone with the American public, and as a result of his efforts, ushered in the "sax craze" of the 1920's. Brown formed the sextet with which he was known, called the Six Brown Brothers, in 1911; they reached the height of their popularity around 1924. He demonstrated to an eager America that the saxophone could do "... moan, laugh, cackle, titter, squeal and grunt," which, for some reason, impressed the public as being jazz, and started the misconception. The saxophone soon became the most talked-of instrument in the country.

The "sax craze" was in progress during the years 1919-25, reaching its intensity around 1923-24. During 1924 and 1925, over one hundred thousand saxophones were manufactured and sold in the United States. They were also being imported in large numbers. During the craze years, over a half a million saxophones were sold in this country. Relatively few were sold to real jazz musicians.[47]

The saxophone did not begin to play a significant part in jazz until the beginning of the 1930's. By then, the trends in jazz had already been set, by instruments which are not thought of in connection with jazz as much as the saxophone is: the clarinet (Benny Goodman), the trombone (Tommy
Dorsey), the cornet (Louis Armstrong), and the piano (Earl Hines). Despite the implied ties between the saxophone and jazz, history attests that jazz was the last musical idiom to accept the saxophone.

FOOTNOTES


6 Kechtersky, p. 11.

7 Ibid., p. 13.


9 Sigurd Rascher, "Thoughts About the Saxophone Mouthpiece," Instrumentalist, IX (October 1964), 18.

10 Georges Kastner, Manuel General de Musique Militaire (Paris: Didot Freres, 1848), plate XXV.


15 GD, VIII, 430.

16 Baime, Woodwind History, p. 143.


19 Ibid., p. 104.


22 Kechtersky, p. 18.


24 Kechtersky, p. 19.


27 Kechtersky, p. 30.


29 Carse, p. 102.

30 Ibid., p. 230.


32 Carse, p. 490.


34 Carse, p. 490.


38 Milstein, p. 56.

39 Goldman, p. 77.

40 Nobert Quaye, "Stars and Stripes Forever," Part VI, Instrumentalist, IX (February 1965), 42.

41 Goldman, p. 90.

42 Nobert Quaye, "Stars and Stripes Forever," Part II, Instrumentalist, IX (October 1954), 44.

43 Advertisement for Buescher Saxophone, School Musician, XXXII (February 1961), 64.

44 Schwartz, Story of Instruments, p. 148.


47 Schwartz, Story of Instruments, p. 139 et seq.

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SIR CARL BUSCH: HIS LIFE AND WORK
AS A TEACHER, CONDUCTOR, AND COMPOSER
Don Lowe
University of Missouri-Kansas City

The development of music education in the United States, while indebted to the efforts of countless school music teachers, must also recognize the contributions made by the many private music teachers and professional musicians. Allen Britton writes:

There is a great deal of music teaching in the United States besides that which goes on in the schools. Thousands of private piano teachers perform an inestimably valuable service in the musical education of children and adults as do thousands of private teachers of other instruments. . . . And from the days of Theodore Thomas, through those of Walter Damrosch, right down to Leonard Bernstein at present, the American symphony orchestra conductor has engaged in some semblance of educational endeavor. 1

Sir Carl Busch, a Kansas City teacher and professional musician of the late nineteenth and early twentieth centuries, maintained a position closely resembling that described by Britton. Born March 29, 1862, in Bjerre, Denmark, Busch came to Kansas City in 1887 where he remained until his death, December 19, 1943. During his fifty-six years of residency, he became one of the city's most celebrated musicians, known internationally as a conductor and composer. As a conductor, Busch was most active from 1887 to 1918, when he directed several Kansas City choral and orchestral organizations and appeared as a guest conductor in both the United States and Europe. Among his many Kansas City conducting assignments were the Kansas City Philharmonic Choral Society (1903-1913) and the Kansas City Symphony (1911-1918). As a composer, he gained international recognition through the performance of his compositions by such leading musical organizations as the Theodore Thomas Orchestra, the Anton Seidl Orchestra, the Chicago Symphony, the Minneapolis Symphony, and the Leipzig Philharmonic. His greatest distinction was gained for his compositions based on American subjects, particularly those relating to the American Indian, and for several award-winning compositions written between 1900 and 1920. Additionally, Busch was a staunch supporter of music education and from his earliest days in Kansas City contributed his time and talents in its behalf.

Busch was educated at the Royal Conservatory of Music in Copenhagen, principally under the tutelage of J. P. E. Hartmann and Niels Gade. While in Copenhagen, he also performed as a violinist and violist in orchestras directed by Johan Svendsen and Balduin Dahl, and became personally acquainted with the Scandinavian composers Edward Grieg and Ole Olsen. Following graduation from the Conservatory in 1885, Busch studied for a short time at the Brussels Conservatory of Music and in Paris, where he became a student of the French composer and conductor, Benjamin Godard. Through Godard, Busch met several prominent musicians, among them Anton Rubinstein, Camille Saint-Saens, and Charles Gounod. In 1886 Busch returned to Copenhagen where, along with Daniel Hannemann, Waldermar Pappenbrock, and Henry Mathiassen, he organized the "Gade String Quartet" and left with the group for the United States and its ultimate destination of Kansas City, Missouri.

Kansas City was not ready to support a resident string quartet in 1887 and after several months of unsuccessful attempts to establish itself, the group disbanded; except for Busch, the quartet members eventually left Kansas City or began new careers. Busch remained and for a short time continued to perform as a professional violist in local theater orchestras; however, his aspirations to play professionally were soon abandoned and thereafter his time was devoted exclusively to teaching, conducting, and composing.

From 1887 until 1924 Busch's teaching role was that of a private instructor: violin, viola, ensemble, and theoretical subjects. For many years his studio was located on the corner of Ninth and Locust streets in a building known today as the Studio Building. In 1895, following four years of advanced piano study at the Leipzig Conservatory, Mrs. Busch opened a studio adjoining her husband's and soon established herself as one of the finest piano teachers in the Midwest. Together Mr. and Mrs. Busch became conspicuously identified with musical life in Kansas City, providing
opportunities for music education at a time when such were not readily accessible in the public schools. Among Busch's students of this period, the most notable were George Elliott Simpson, William Dawson, Leith Stevans, and Robert Russell Bennett. Bennett, who maintained a close relationship with Busch throughout the latter's life, recalled: "As a teacher Sir Carl was very thorough and preached the gospel of the old fundamental rules. When you studied with him you could say you had studied harmony, counterpoint and fugue without blushing."

In 1924 Busch began a career as a college professor, and although sixty-two years old at the time, continued his college teaching for the next fourteen years. From 1924 through 1926 he was a member of the Chicago Musical College Summer Master School faculty; in the summer of 1927 he joined the Brigham Young University faculty for a four-week term, followed by a six-week term at Notre Dame. He taught at Brigham Young only one summer, but continued to teach at Notre Dame each summer through 1938. From 1927 until 1935 Busch was also a member of the Kansas City Horner Conservatory faculty and in 1933 was appointed to the first music faculty of Kansas City University, where he remained until 1935. His principal responsibility at these schools was to give private instruction in theoretical subjects.

Many students studied with Busch during his years as a college instructor, including Leroy J. Robertson, now a recognized composer and the former head of the music schools at Brigham Young University and the University of Utah. Robertson had graduated from the New England Conservatory in 1923 where he studied with George Chadwick, and was on the Brigham Young faculty at the time of his studies with Busch:

Dr. Busch went over my manuscripts making suggestions regarding areas which were satisfactory and which might be used as models for weaker sections. He was sympathetic and helpful and anxious to promote the works of his students when they became worthy.

In addition to his contributions as a private teacher, Busch promoted music education through his work as a conductor. Shortly after the organization of the Kansas City Symphony in 1911, he sought the cooperation of the Kansas City Missouri Board of Education in organizing a series of children's concerts. When no assistance was offered, he secured the use of Convention Hall and presented the concerts on Saturday mornings. In 1914 the Board of Education reconsidered and agreed to cooperate with Busch in bringing orchestral music to the city's school children. With the assistance of Mrs. B. M. Whiteley, supervisor of music for the Kansas City Missouri schools, Busch arranged a series of three concerts for the high schools and one concert for the elementary schools. During the same year, he worked with Mrs. Whiteley in producing the first Kansas City Missouri High School Choral Contest and Festival Concert. Both the children's concerts and the festival received special mention in Mrs. Whiteley's annual report to the Board of Education:

Two events of interest occurring in the spring must be noticed, their importance being such that their yearly recurrence is highly desirable. Reference is made to the contest that was held between the

choral organizations of our high schools and the high class concert that was given jointly by them, and the concert given by our Kansas City Symphony Orchestra to the children of our elementary grades. These two musical events were of great educational value, stimulating individually and communally.

Following the disbanding of the Kansas City Symphony in 1918, Busch never again held a permanent conductorship; however, from 1918 until 1935, he continued to make guest conducting appearances, many of which were with student organizations from the Kansas City Public Schools and the surrounding area, as well as the National Music Camp at Interlochen. His association with Interlochen dated from the camp's opening summer in 1928 through 1932 and for one additional summer in 1934. During these years Busch was one of several musicians who donated his services to help Joseph E. Maddy, the camp's founder. Busch was very impressed with the quality of work taking place at Interlochen and was optimistic about its long-range influence:

These youngsters are benefiting tremendously from their study here unquestionably, but the influence which their work has upon our educational system and upon the communities from whence they come is the thing which will be most lasting.

Closely aligned with Busch's guest conducting was his work as an adjudicator, particularly for the band and orchestra contests of the 1920's and 1930's. In 1925 and for the next ten years, Busch judged the Kansas, Missouri, and Oklahoma Inter-Sate High School Music Contest at Pittsburgh State College, Pittsburgh, Kansas. In 1929, he was selected to judge the National Band Contest being held at Denver, Colorado, for which all Class A bands were required to perform his composition, A Chant from the Great Plains. Following two days of judging, Busch conducted a mass band composed of the six winning bands in a final performance of the number. Rev. Jerome M. Boyle, now retired from the University of Notre Dame faculty, was a member of that five hundred-piece band:

\[
\ldots \text{At the national contest, Carl Busch directed the winning bands in a performance of his work [A Chant from the Great Plains]. He was an impressive figure with his white hair and goatee. I was thrilled to play under his direction. It was a high point in my high school band career. \ldots} 
\]

Busch adjudicated many other contests between 1928 and 1933, including the 1929 World Bandmaster's Contest at Chicago's Soldier's Field. In 1933 and 1934 Busch, along with Edwin Franks Goldman and A. A. Harding, judged the Tri-State Band Festival and Contest at Enid, Oklahoma. In 1935, Busch worked with Edwin Franks Goldman, Herbert L. Clarke, William F. Ludvig, D. O. Wiley, Donald M. Swarthout, Harold Bachmann, and Earl D. Irons, in judging the first National Band Festival to be sponsored by the University of Kansas at Lawrence. As a result of his association with Goldman and other leading bandmasters of the day, Busch was elected an hono-
Busch also contributed to the development of music education through his work as a composer. Among his compositions were several instrumental pieces for young people and a few vocal works for children. Many of these were written for specific student organizations such as those at Interlochen and in the Kansas City, Missouri Public Schools. His instrumental works prior to 1930 were written principally for strings and included many violin and viola solos composed as pedagogical pieces for his private students. From approximately 1930 until his death in 1943, Busch composed exclusively for wind instruments. Stimulating his interest in writing for the wind media was the phenomenal growth of school bands during the 1930's and the subsequent need for good wind literature. In all of his works for students, Busch attempted not only to produce music which was marketable, but more importantly, to produce music which would be musically interesting and of pedagogical value. In the preface to his Suite for Three Trumpets Busch wrote:

The Suite here offered is intended primarily for members of high school orchestras and bands, and published as it is in score, should be of interest and profit to the students. Each piece... offers its own problems, but care has been taken throughout not to overtax the players and to avoid extremes of compass. For a successful interpretation, a somewhat advanced musicianship is expected so that the technique involved in the dynamics may be observed. I would also call attention to the fact that the three parts are somewhat on the order of a concerto in that the musical substance appears from time to time in the three parts increasing thereby the individual interest of each player. Carl Busch, Kansas City, Mo., June, 1933.14

Busch's efforts in behalf of music and music education were recognized during his lifetime through numerous honors bestowed upon him, including designations of Knighthood by the Kings of Denmark and Norway, and honorary doctoral degrees from Bethany College at Lindsborg, Kansas, and the Kansas City-Horner Conservatory of Music. In 1938 Kansas City paid tribute to Busch with a testimonial concert in appreciation of his many years of musical service. At the time of the concert, a bronze bust of Busch, sculptured by Jorgen C. Dreyer in 1914, was presented to the city for permanent display at the Kansas City Music Hall, where it remains today as a tribute to one of the city's most distinguished musicians.

CONCLUSIONS

Although Busch is usually referred to by historians as a Kansas City composer, based on the data reviewed in this study, it may be concluded that Busch should receive equal recognition for his work as a teacher and for his contributions to the development of music education. During his lifetime, his abilities as a teacher were recognized by several universities and his position as guest professor on these faculties allowed his influence to extend beyond Kansas City. In recent years he has gained additional stature as a teacher through the success of some of his students. The importance with which Busch considered music education is best summarized in a statement made by him in his late years:

To me, one of the finest musical activities today is that which we find within our schools — such as Chorus, Orchestra, and Band. I have been interested in this movement from its infancy, some twenty-five years back, and have taken a fairly active part by participating, during a space of years, in various Festivals of a City, State, or National character, and have thus had an opportunity to come in actual contact with these young musicians and see for myself the amazing growth of their love for, and appreciation of, the best in our music literature.15

FOOTNOTES

2 George Elliott Simpson (1879-1968) studied with Busch in Kansas City from 1894 to 1900 and later, on Busch's advice, continued his studies in Europe at the Royal Conservatory of Leipzig. After graduation from the Conservatory, he remained for an additional year as an assistant to Carl Reinecke, Mrs. Busch's former teacher. He returned to Kansas City in 1897 and joined the faculty of the newly formed Kansas City Conservatory, where he taught various theoretical subjects. He also gained reputation as a composer, with works produced in this country and in Europe. One of his best known works, the American Symphony, was performed in 1925 by the Houston Symphony. In 1930 he joined the Kansas City-Horner Conservatory faculty to teach orchestration, replacing Busch, who had retired during the 1923-24 school year (Kansas City City Conservatory Bulletin, 1938-39, p. 9).
3 William Dawson (b. 1899), composer and director of the School of Music at the Tuskegee Institute since 1930, studied with Busch in Kansas City from 1922 to 1926. Dawson, a student at the Kansas City-Horner Conservatory at the time, studied composition privately with Busch, who had not yet joined the Conservatory staff. Dawson later won the Rod Wanamaker contest for composition in 1923 and in 1933 had his Symphony No. 1, the Negro Folk Symphony, performed by the Philadelphia Orchestra under the direction of Leopold Stokowski (William Dawson, questionnaire, July 21, 1939).
4 Leah Dawson (1909-1970), former composer for Paramount Movie Studio, graduated from the Horner Conservatory in 1927 and was a student of Busch's about the same time as William Dawson.
5 Robert Russell Bennett, questionnaire, July 1, 1970.
6 The Kansas City Conservatory of Music and Art was established in 1906 and the Horner Institute of Fine Arts in 1914. On July 1, 1926, the two schools merged, resulting in the Horner Institute-Kansas City Conservatory. In 1929 the school was renamed the Kansas City-Horner Conservatory of Music, which in 1934 was renamed the Conservatory of Music of Kansas City.
7 Roberton achieved international fame in 1947 when he won the Reichold Award for his composition, "Trilogy." The $20,000 was the largest amount ever given for a composition.
8 Leroy Robertson, questionnaire, June 8, 1971.
9 On May 18, 1914, an afternoon concert and evening concert were held at Central High School. For the afternoon contest, three of Busch's compositions were required numbers: "A Dream of Summer," girls' chorus; "When the Stars Were Young," boys' chorus; and "Song of the Forest, Gondolier," boys' chorus. For the evening concert, the participating schools united in a festival chorus to perform three of Busch's cantatas under his direction: The Brown Heather, male chorus; A Song of Spring, women's chorus; and Paul Reveres Ride, mixed chorus. The Kansas City High School Spring Festival and Concert, May 15, 1914, University of Missouri-Kansas City Conservatory of Music, Lichtebrar Collection).
11 The Overture, National Music Camp, 1930, p. 43.
13 Busch's only band work of this period, A Chant From the Great Plains, became quite popular with school bands, but had been composed for the Goldman Band rather than for student organizations.
ABSTRACT

CONTEMPORARY VIOLIN FINGERING

University of Missouri-Kansas City

The purpose of this research paper is to define some present-day principles which govern the choice of fingering; to show the extent of departure from tradition; and the consequent influences on pedagogical practices. The choice of fingering involves both musical and technical considerations. While it is recognized that the two are related, these considerations are discussed separately in order to facilitate clarity.

This investigation of violin fingering is, in general, a comparison of authoritative opinions and practices. Through this comparison some general principles that govern the choice of fingering are set forth.

The fingerings that are considered technically correct are those that afford ease in execution. The expediency of a technical fingering is based on consideration for the physical characteristics and capabilities of the hand and the individual fingers, definition of natural finger action, and the influences of various hand and arm adjustments.

The musical considerations that involve choice of fingering are influenced by both musical style and performance style. Musical results take precedence over technical ease. Since personal taste is involved, the principles applying to the choice of a fingering for the purpose of musical affect are generally subjective. Articulation and timbre are the principle musical aspects affected by fingering. Articulation can be varied through action of the fingers in one position and through techniques used in changing position. Timbre is varied not only by the choice of a string, but by the attitude of the fingers, the pressure they exert on a string, and their size.

From the study of various contemporary musical editions and from the advice of violin authorities, it is concluded that contemporary fingering practices are generally based on traditional techniques. The selection of improper or irrational fingerings is a result of persistent habits derived from technical studies and a lack of consideration for the musical content of a particular composition.

ABSTRACT

TWENTIETH CENTURY WOODWIND QUINTET MUSIC
OF THE UNITED STATES

University of Missouri-Kansas City

The purpose of this thesis was to compile an accurate and comprehensive index of music written in the United States by United States citizens for the standard woodwind quintet combination of instruments: flute, oboe, clarinet, horn and bassoon. Inherent in this purpose were two goals: first, to discover hitherto unknown compositions for woodwind quintet and provide information concerning performance material for these works; second, to ascertain and clarify (to the fullest extent possible from the composers themselves) the accuracy of listings found in previous bibliographies and indexes.

The period under examination was 1900 through 1968. The works indexed are original compositions and not arrangements, except by the composer himself.

The thesis is in two parts. Part I consists of two sections, the Primary Source Index and the Secondary Source Index. Only when the composer himself is the source of information is a composition included in the Primary Source Index. Works from other indexes and bibliographies, publishers' catalogs, and other publication sources (after cross-checking) provide the material for the Secondary Source Index.

Part II is a study and analysis of the six most recent and complete bibliographies that include woodwind quintet music. All six were published within the span of eleven years, 1956-1967:


Rasmussen, Mary. "A Bibliography of Chamber Music Including Parts for Horn, as compiled from Thirteen Selected Sources." Brass Quarterly, II (March, 1959), IV (Summer, 1961).


Forms requesting information concerning compositions by resident composers were sent to 658 music departmental listed in the National Association of Schools of Music Directory, 1967, and The College Music Society's Directory of Music Faculties in American Colleges and Universities, 1967-1968. The replies from member institutions of the National Association of Schools of Music totaled 162, or approximately 55%. Of the 366 institutions taken from The College Music Society's directory, 111 re-
sponded, or about 30%. The response from the total of 658 music departments was 42%. In addition, 78 personal letters to composers yielded 71 replies. In a few instances information was obtained by telephone conversations with composers or librarians.

Although 157 of the total 273 responses concerned instrumental combinations other than quintet, 116 (42.2%) were replies from composers sending information about their works for woodwind quintet. Forty-four of these 116 replies were from composers whose compositions for quintet had been published or listed in available bibliographies, and 72 were from composers whose works had never been listed in any bibliography or source available to interested performers or teachers. These 116 composers were located in 32 states representing all regions of the United States.

Of the six bibliographies only that of Weerts constitutes an attempt to uncover new material, while the other compilers apparently only re-edited previous indexes. The present study reports many errors in their listings, several of which seem to have been uncritically copied from one publication to the next.

**ABSTRACT**

**MUSIC TEACHER CLASSROOM TECHNIQUE VERSUS COMPUTER-ASSISTED INSTRUCTION**

James Von Feldt, D.M.A., 1971
University of Missouri-Kansas City

The problem was to make a comparison between two modes of teaching selected music concepts in a standard public school: teacher classroom technique versus computer-assisted instruction.

The purpose of the study was to test the validity of teaching selected music concepts by computer-assisted instruction. The objectives were to show:

1. How computer teaching compares to standard teaching in terms of achievement gain or loss.
2. How computer teaching affects students with a high initial achievement score.
3. How computer teaching affects students with a low initial achievement score.
4. A comparison of achievement and time spent in the two modes of instruction.

The student population was comprised of thirty-seven volunteer seventh grade General Music class students from Bingham Junior High School in Kansas City, Missouri. Twenty volunteer students were randomly assigned to the standard classroom group (Control Group) and seventeen were randomly assigned to the computer-assisted group (Computer Group).

The selected basic music concepts taught in both groups were: the staff, the grand staff, the “G” clef, the “F” clef, letter names of lines and spaces, ledger lines, notes, rests, note and rest values, accidentals, time signature, measure, bar-line, double bar-line, repeat sign, crescendo and decrescendo, tempo markings and abbreviations of dynamic indications.

The five stages of development of the comparative study were: (1) development of a test instrument, (2) development of a CAI music program (Music I), (3) pretesting, (4) selection of students for the project, and (5) posttesting.

The results were based upon the Pretest and Posttest Mean scores and Standard Deviations of the Computer Group and Control Group. A t-test for significance was run as well as an analysis of E-score.

Conclusions based upon the t-test were:

1. Computer-assisted instruction is as effective as teacher classroom techniques.
2. Computer-assisted instruction as designated by this study does not affect the achievement scores of students that possess high initial achievement scores.
3. Computer-assisted instruction is significantly effective in teaching students that possess low initial achievement scores.
4. Computer-assisted instruction teaches equally as well as teacher classroom technique but in thirty percent less time.

Conclusions based upon the E-score show that:

1. Teacher classroom technique is superior to computer-assisted instruction when considering students that possess high initial achievement scores (students in the top quartile) and computer-assisted instruction is superior to teacher classroom technique for students below the top quartile. However, when considering the Pretest scores of all seventh grade General Music class students at Bingham (the Control and Computer Groups did not make initial scores typical of the total seventh grade General Music class population) computer-assisted instruction is shown to be more than twice as effective as teacher classroom technique.
2. Computer-assisted instruction as designated by this study does not teach students possessing high initial achievement scores.
3. Computer-assisted instruction is particularly effective in teaching students that possess low initial achievement scores.
4. Computer-assisted instruction is slightly superior to teacher classroom technique when considering the data generated by the Computer Group and the Control Group.
ABSTRACT
A PROGRAMMED COURSE IN ACOUSTICS IN MUSIC FOR JUNIOR HIGH SCHOOL

Marcus Kalipolites, D.M.A., 1972
University of Missouri-Kansas City

The purpose of this dissertation was to prepare a programmed course in acoustics for the Junior High School music student which was comprehensible at his level of understanding, comprehensive in scientific detail, usable for independent study, and designed to increase his appreciation for music.

The manner in which the programmed course was constructed is presented in extensive detail. The programmed course was formulated upon five principles: The Behavior of Sound, The Origin and Propagation of Sound, Frequency and Pitch, Intensity and Loudness, and Waveform and Quality. For each of the five principles, a list of Specific Objectives was prepared in behavioral terms. Each of the principles was designated as a separate unit, the structure of each unit being divided into a series of concepts, sub-concepts, and musical examples. Among the programming techniques most frequently used are overlapping, spiraling, and generalizing. In addition, deductive and inductive logic are employed in the unfolding of information. A discussion of the procedures used in the formulation of the programmed course leads to the next part, the Experimental Design, in which the first test of program validation is presented. The Experimental Design was arranged by which the presentation of acoustics was compared at the 7th grade level. In the Control Group, students were taught by conventional teaching (lecture, demonstration, assigned readings, and record-listening) while the Experimental Group used the programmed course.

In its implementation, the Experimental Design was concerned with two general categories. The first of these dealt with a description of the student population. Among the student criteria which were considered in the study were I.Q., reading level, selection of students, attendance, prerequisite knowledge, and the characteristics of the community in which the study was conducted.

The second general category of the Experimental Design had to do with technical factors. Technical criteria included a calendar of events, descriptions of the Pre-test and Post-test, the utilization of facilities, and motivation. A Student Questionnaire was also submitted to students of the Experimental Group in order to assess their feelings and attitudes about the programmed course.

Results of the Design are indicated by tables and narration. With respect to I.Q. and reading level, there was no significant difference between the Control and Experimental Groups. From the Pre-test to the Post-test, the Control Group registered a mean gain of 7.57 (out of a maximum 30), while the Experimental Group showed a gain of 5.21.

Conclusions are drawn from the results. With respect to the comparison made between conventional teaching and the programmed course, it would appear that conventional teaching was slightly more effective. Nevertheless, there was no significant difference in the results. Among the limitations experienced by the Experimental Group were time scheduling, work areas, lack of teacher-student interaction, motivation, lack of acoustical demonstrations, and cheating.

This study concludes with recommendations for future research in the teaching of acoustics. Among the proposals is one for the use of CAI, essentially a Programmed Instruction method. The computer, with audio and visual flexibility is ideally suited to programming for the teaching of acoustics.

The Appendix contains lesson plans for the Control Group, Pre-test and Post-test specimens, a table on the distribution of questions used in the Pre-test and Post-test, an introduction to Programmed Instruction for the student, a scoring key for the tests, and A PROGRAMMED COURSE IN ACOUSTICS IN MUSIC FOR JUNIOR HIGH SCHOOL, the basis for this study.

ABSTRACT
THE INSTRUMENTAL MUSIC OF PAUL A. PISK

University of Missouri-Kansas City

Paul Amadeus Pisk (b. 1893) is well known as a composer and musicologist. His vast contributions to music for many years have secured for him an esteemed position in present music circles.

Pisk resided in Vienna from 1893 to 1936. His teachers were Julius Epstein, Franz Schreker and Arnold Schoenberg. In 1916 he received a Ph.D. from the University of Vienna; his dissertation subject was "Das Parodieverfahren in den Messen des Jacobus Gallus."

Pisk has long been active as a teacher; he taught at three institutions in Vienna and has been associated with several American universities.

Pisk has been prominent in societies and organizations for the advancement of new music; the first was the Schoenberg Verein fur musikalische Privataufahrungen which he served as secretary. A few years later he was one of the founders of the International Society for Contemporary Music. As late as 1962, Pisk was still serving this aspect of music by accepting the position of secretary of the Webern Society.

As a writer and apologist for new music Pisk has had a distinguished career; his scholarly works have appeared in many publications and have been presented at countless meetings. While in Vienna Pisk was a contributor to the Wiener Arbeiterzeitung and was a co-editor of the Musikblatter des Anbruch.
Pisk has written just under a hundred orchestral, keyboard and chamber compositions; almost half of these works are for chamber ensembles and are, in Pisk's words, his most original compositions.

Although several influences existed during Pisk's many years as a composer, his style remains basically unchanged from its auspicious beginning in 1914 to his latest compositions, to date, of 1969. The understanding of musical form serves as an important part of his style; most of his movements are cast in a traditional formal structure.

The concept of unity is basic to Pisk's style; both thematic and accompanying material are derived from an opening motive.

Although there are examples of monophonic and homophonic textures, Pisk is essentially a linear composer. Most of his compositions, usually in a three or four-voice texture, exhibit a wealth of learned contrapuntal skills.

There are several concepts of harmony in Pisk's music; the dissonance level, which is high, is often a result of impure octaves.

The majority of Pisk's compositions is atonal.

As an orchestrator Pisk is conservative; the aim of his orchestration technique is to project thematic material in a contrapuntal setting.

Paul A. Pisk is a warm person; as a teacher, musicologist and composer he has the respect and admiration of those who know him. He has had notable success as a composer; his works are frequently performed and several of them are published. Paul A. Pisk has been a vital and driving force in music for more than fifty years and will be remembered as a distinguished contributor to the music of the first part of the twentieth century.

**ABSTRACT**

**A STUDY OF CHARACTERISTIC STYLISTIC TRENDS FOUND IN THE CHORAL WORKS OF A SELECTED GROUP OF AFRO-AMERICAN COMPOSERS AND ARRANGERS**

Carl Gordon Harris, Jr., D.M.A., 1972
University of Missouri-Kansas City

It is the purpose of this study (1) to trace the development of choral music by certain Afro-American composers and arrangers from the late nineteenth century to contemporary times; and (2) to delineate certain characteristic trends found in the choral works of a selected group of Black composers and arrangers, who, because of their different styles of writing, have been labeled by this writer as Black Trailblazers, Black Nationalists and Black Innovators.

The Black Trailblazers are represented by Harry T. Burleigh, Robert Nathaniel Dett, James Weldon Johnson, J. Rosamund Johnson, John Wesley Work, Jr., Frederick J. Work and Clarence Cameron White. These Black pioneers used Negro folk melodies in small choral forms, employing compositional techniques of the late nineteenth century. Black Nationalists William L. Dawson, Hall Johnson, William Grant Still, John Wesley Work, III, and Frederick Hall used the melodies of their predecessors as well as Black poetry and jazz idioms in their arrangements and original choral works. Margaret Bonds, Hale Smith, Ulysses Kay and Undine Smith Moore are among those Black Innovators who have drawn freely from divergent sources and styles to create their own unique compositions.

Correlated with this study, on April 29, 1971, the writer conducted the Virginia State College Concert Choir of Petersburg, Virginia, in a program of arranged Negro spirituals and original compositions by Black composers that traced the stylistic trends which have developed in Afro-American choral music.

After the introductory chapter, this thesis contains a biographical summary of each composer used in this study, a discussion of certain stylistic trends which have evolved and developed in the performance of Negro spirituals as the result of presentations by Black college and professional choral groups, and concludes with an analysis of the choral literature performed on the April 29, 1971 program.

The Appendices contain the printed program for the April 29, 1971 performance, the lecture which accompanied the performance, copies of the music performed, and a selected list of choral works by Afro-American composers and arrangers.

**A HISTORICAL STUDY OF BLACK MUSIC AND SELECTED TWENTIETH CENTURY BLACK COMPOSERS AND THEIR ROLE IN AMERICAN SOCIETY**

Tilford Brooks, Ed.D., 1972
Washington University

The primary objective of the paper is to study and examine the music of the American Black man, both folk and composed music, from a historical and sociological perspective as well as through musical analysis. The results indicate that the Black man, in spite of intolerable conditions under which he is forced to live, has been able to make very definite contributions to American society in the field of music. The Black man, through his own distinct musical characteristics has made an artistic contribution which is a product of his environment. His race, in a biological sense, has had nothing to do with these characteristics. They are sociological in nature.

A complete description of Afro-American music in general is given, relating those traits found in this music with similar traits found in music
which is indigenous to West Africa, and contrasting them with music in the European tradition. Musical examples are used when appropriate.

Those Black music forms which came into being before 1900 are examined from a historical perspective to determine their origin and are analyzed musically to determine their most salient characteristics. Those Black music forms before 1900 which are indigenous to the Black ethnic group are the spiritual, work song, field holler and cry, blues and Black Creole music.

Black music forms that become a part of American music around or after 1900 are also examined from a historical perspective to determine their origin. A musical analysis with musical examples is given which indicates the most characteristic traits of these forms. Those Black music forms after 1900 which are discussed include ragtime, jazz (all kinds), gospel music, rhythm and blues, rock and roll, and soul music.

The role of the Black musician in American society from the beginnings of slavery to the present time is discussed. The various socio-economic factors which affected his role are described. Outstanding Black musicians are identified.

Although there have been Black composers in many countries, this study is concerned with the Black composer in American society and an evaluation of the sociological factors which influenced his compositions. Those twentieth century Black composers who synthesized the European and Black musical traditions in their compositions are identified. Biographical data, major works, and characteristics of their musical styles with appropriate musical examples are given.

Those younger Black composers are discussed who are eclectic in their approach to composition in that they use materials from many diverse sources. Biographical data, major works, and a musical analysis of significant compositions with musical examples are presented.

The most significant Black composers of jazz and related jazz forms are identified and discussed. While the composers in jazz and related forms have had less of an impact on these music forms than composers in other musical idioms, their contributions to these related musical forms, which are significant, are identified.

Finally, a comprehensive listing of twentieth century Black composers is given along with a short biographical sketch, known compositions and available recordings of these compositions.
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PREFACE

The Missouri Journal of Research in Music Education, published by the Missouri Music Educators Association, is devoted to the needs and interests of the school and college music teachers of Missouri and the nation. This issue, Volume III, Number 2, is the twelfth to appear in as many years.

The members of the Editorial Committee are grateful to those readers who have written suggestions concerning the content of past issues and request that criticisms and suggestions, always welcome and never unheeded, again be sent to the Editor concerning the content of this issue. We strive for a reasonable balance among music theory, history, philosophy or aesthetics, and pedagogy. It is difficult to judge how successful we are without reader response.

Since this publication is not copyrighted, complete articles or excerpts from articles may be made without securing permission from the editor or the authors. It is requested that credit be given to the Missouri Journal of Research in Music Education.

The members of the editorial board wish to express their appreciation to Alfred W. Bleckschmidt, Director Emeritus of Fine Arts for the Missouri State Department of Education, for his invaluable contribution to the success of this journal and to the Missouri State Department of Education for its generosity over an eleven year period by providing funds for printing and mailing the journal.

Now we express our deep gratitude to the Missouri Music Educators Association and to its president, Dr. Wynn Harren, for so generously shouldering the Journal's financial burden to make it possible to continue to publish the Missouri Journal of Research in Music Education.

The Editorial Board
A CENTURY AND A HALF OF MISSOURI MUSIC

Jack L. Ralston
University of Missouri — Kansas City

INTRODUCTION

Missouri's musical heritage is a proud and interesting one. From the folk and traditional music of the rural areas to the cultivated art music of the urban areas, Missourians have enjoyed music listening, participation, and creativity. Among our Missouri composers we claim Katherine K. Davis, Don Gillis, Robert Russell Bennett, Leith Stevens, Virgil Thomason and many more. Performers, publishers, educators have carried Missouri music throughout the world. Scott Joplin's ragtime piano music and Kansas City jazz are acknowledged to be the finest and are even now receiving a new wave of interest among music scholars who are discovering what the public has known all along.

Ernst Krohn, of St. Louis, first tackled the job of reporting on Missouri Music in a series of articles in the Bulletin of the Missouri Historical Society in 1923, later privately printed in his book, A Century of Missouri Music in 1924. This book was reprinted in 1971 with additional essays and appendices. Important as this book is it does not pretend to cover the outlying areas of the State or the folk or popular music. Jazz, for instance is a later development and the commercial country and western music of Springfield also came along later. Alfred Blecksmith compiled a list of composers for the 1971 edition and this author contributed a listing of UMKC musicians.

The Ragtime music which centered in Sedalia and St. Louis in its early days is chronicled in Rudi Blesh's They All Played Ragtime which remains a classic in documentation through interviews with the men and women who made it happen.

Kansas City's Jazz did not receive its first full-blown treatment until 1971 when Ross Russell issued his authoritative history, Jazz Style in Kansas City and the Southwest. His second venture, Bird Lives concentrates on the contributions of Charlie Parker.

Aside from these books there have been dozens of articles and recordings which are of interest to those who are concerned with Missouri's musical heritage. It is the purpose of this article and bibliography to indicate those items which will be of particular assistance to teachers and program planners. It is not meant as a definitive history of Missouri music. The author has based the article on a short illustrated talk which he has given using slides and taped excerpts before various groups across the state. It was not intended that the talk be comprehensive but that it should cover some of the highlights of Missouri's music and musicians giving a broad coverage which will entertain as well as enlighten. In preparing this article, some of the original text from the talk is retained but in place of the slides and taped examples, bibliographic entries for correlative reading or listening are given. It is hoped that this approach will make the bibliography more useful to the user. Additional suggestions for entries will be welcomed by the author and may be forwarded to him at the Conservatory Library, University of Missouri — Kansas City, 4420 Warwick Boulevard, Kansas City, Missouri 64111.

"SHOW ME" MUSIC

Missouri's music is the story of the men and women who settled along the Mississippi and Missouri Rivers. The discoverer DeSoto came in 1541 and LaSalle a century later. Plans for statehood began in 1818 only 16 years after the Louisiana Purchase. Missouri was admitted to the Union on August 10, 1821.


Lloyd, Frederic D. J. Lloyd's Church Musicians' Director, 1910. Chicago: Ritsmann and Brookes, and Co., 1910. (Missouri church musicians listed on page 130.)


Missouri. Governor's Committee on the Arts. The Arts and the State of Missouri. Report to the Governor Submitted to the Governor's Committee on the Arts and its Incorporated Counterpart the Missouri Council on the Arts, 1964.
NEGRO SPIRITUALS

While the origins of Negro Spirituals may have been African or Afro-American, the impact of the Spirituals on religious, Jazz and art music has been considerable. William L. Dawson, a distinguished arranger of Spirituals was Choral Director for 25 years at the Tuskegee Institute and is a 1925 graduate of Kansas City's Horner Institute, where he studied with Sir Carl Busch. Another arranger of Negro Spirituals was Major N. Clark Smith, teacher and bandsman at Kansas City's Lincoln High School where he exerted considerable influence on the Jazz of the 1930's.

The William Dawson Song Book. The Black Heritage Series, Volume II. Virginia State College Choir. (Contents: Every Time I Feel the Spirit; Mary Had a Baby; King Jesus is A-Listening; Talk About a Child That Do Love Jesus; There is a Balm in Gilead; Lil' Boy Child; Oh What a Beautiful City; Ain't That Good News; Hail Mary; Jesus Walked This Lonesome Valley; Soon Ah Will Be Done; Behold the Star; Ezekiel Saw the Wheel.)


OZARK FOLK SONGS

The religious and secular songs of the Mountain Folk are a tradition which continues to this day although threatened by the intrusion of radio, television, and commercialism. Vance Randolph's Ozark Folksongs (1946-50) records hundreds of songs collected in the Missouri Ozarks as does Belden's series of publications printed earlier.

Loman Cansler learned many of these songs as a boy near Springfield and has used them in his teaching in North Kansas City. His version of Kicking Maude is a song about another Missouri product, the mule.

FH 5330: Contains: Adam and Eve; The Little Family; The Step-mother; The Last Fierce Charge; Old Mother Hubbard; Ol' King Quine; Aunt Jenina's Platter; Charley Brook; (Two Letters); Josiah and His Sally; Will, the Weaver; Dick Norman, the Cobbler; The Revolutionary Tea; The Drunkard's Song; Birdie Darling; Little Dame Crump; Wait for the Turn of the Tide.

Candler, Loman. Missouri Folk Song: Sung by Loman Candler. New York: Folkways Records, 1959. (Folkways FH 5324) Contains: Sally; Arthur Clyde; When I Was for to Take My Leave; Jurgenent; The Lover's Quartet; The Two Sisters; Kickin' Maud; Charlie Guitaude; Joe Bowles; The Housekeeper's Complaint; I Told 'em Not to Grieve After Me; What is a Home Without Love?: The Blue and the Gray; Far Away.


National Geographic Society. Music of the Ozarks. Washington, D. C.: National Geographic Society, 1972. (703 Stereo) Contains: Bunker Hill; Down in the Arkansas; Flop-eared Mule; Harrison Town; Banks of the Ohio; Angel Baad; Utha Carl; Wildwood Flower; Old Bill Jones; Bright Morning Stars; Guitar MEDLEY; Trail to Mexico; Run, Johnny, Run; Knoxville Girl; Crippled Creek; Good-by My Susie Gal; The Arkansas Traveler.

FOLK SONGS, AGAIN

The Missouri Ozarks hold a considerable fascination for researchers of folklore as well as for folk music. Vance Randolph and others have written extensively on the subject and the following entries represent only a sampling of the many articles and books on Ozark folk ways in our State. (The author hopes that the sampling is like the Ozark hound scratching for fleas — a sampling of a number of strategic items rather than just a random scratch here and there for effect).


Carriere, Joseph Medard, ed. Tales from the French Folklore of Missouri. Evanston and Chicago: Northwestern University, 1937.

Collection of Missouri Folk Songs, Collected in 1935 by Charles Van Ravensway, Director of the Missouri Historical Society, in the Fayette and Booneville area of central Missouri. Contains the texts of some 200 folk songs. Unpublished. The manuscript is filed in the Jefferson Memorial Building, St. Louis, Mo.


THE MISSOURI HARMONY

The Missouri Harmony contains a number of songs from revival and camp meetings as well as hymns, anthems, and fusing tunes. The book was compiled by Allen Carden and was published in 1820 in Cincinnati but carries a St. Louis imprint. The Missouri Harmony is a typical oblong tune and instruction book of the period used in singing classes. It was tremendously popular throughout the South and received revisions in 1835 and 1850.

The music in Music Harmony is printed in Four-character shape note notation invented by Little and Smith around 1800. The notation consists of a triangle for Fa, a circle for Sol, a square for Law and a diamond for Mi. A major scale runs Fa, Sol, Law, Fa, Sol, Law, Mi, Fa. The system survives in the Rural South and is called Pasola singing.

Carli Sandburg reports in his American Songbag that Abraham Lincoln sang “Greenfields” (How tedious and tasteless the hours) and that he parodied the song “Legacy.” Two copies of Missouri Harmony were owned by Andrew Jackson and are still housed at his home The Hermitage near Nashville, Tennessee.


SING UNTO THE LORD A NEW SONG

Missouri has the distinction of sheltering the headquarters for a number of international religious denominations. Inasmuch as each of these has a denominational press and issues a distinctive hymnal for congregational use it is appropriate to list them. In some cases, a hymnal companion of commentary on the hymns and hymntunes is given as well. The outreach of each group is international in scope and in several instances radio and television ministries are used as a means of disseminating their message of word and song.

ASSEMBLY OF GOD

CHURCH OF THE NAZARENE

DISCIPLES OF CHRIST

EVANGELICAL AND REFORMED CHURCH
(United Church of Christ)
EVANGELICAL LUTHERAN (MISSOURI SYNOD)

GENERAL BAPTIST

REORGANIZED CHURCH OF JESUS CHRIST OF LATTER DAY SAINTS

THE GENTLE TRADITION

The parlour ballad and popular song have had their exponents in Missouri. Composers and publishers have been particularly active in this field since the 1840's. The sheet music business has been big business and the thousands of pieces in the collections of the Gaylord Music Library of Washington University, the Missouri Historical Society of St. Louis, and the UMKC Institute for Studies in American Music are ample evidence of the activity in the State. Notable song writers include Hattie Nevada, Lucien Denni, John Kalder, Burt Bacharach, and the arranger Robert Russell Bennett.

Amateurs in music perform, compose, and support music programs and organizations. The Swinney Conservatory at Fayette, the Powell Symphony Hall in St. Louis, and the Russell Stover Memorial Auditorium at the UMKC Conservatory of Music are public evidences of private support.

Walt Disney, born in Cameron, was not himself a musician but he has contributed much to the appreciation and enjoyment of music through the medium of the film. His Fantasia (1940) was the first film to explore the possibilities of stereophonic sound in a repertoire that ranged from Bach's Toccata and Fugue in D Minor and Stravinsky's Rite of Spring to Schubert's Ave Maria. Disney's first studio was located at 31st and Troost in Kansas City and in his early days he often designed sheet music covers for J. W. Jenkins Sons Music Company.


"Halls of Song." The Missouri Historical Review, XLII (October, 1944), 131.


"Now It's 'Bluebirds Over the White Cliffs of Dover.'" The Missouri Historical Review, XXXVI (April, 1942), 392.

Remember When . . . Love Songs and Fun Songs of Long Ago. Epic LN 3664. "We are indebted to the Missouri Historical Society for these selections from its vast collection of early American popular music . . . The idea for this album was conceived and brought to fruition by Martin Quigley in conjunction with Epic Records."


Withers, Robert Steele, "Singing." The Missouri Historical Review, L (July, 1956), 381-386.

"You Won't Go Wrong if You Learn by Song." The Missouri Historical Review, XXXVI (July, 1942), 513-514.

INSTRUMENTAL MUSIC

Not all Missouri’s music has been vocal by any means and there is abundant evidence that the early settlers brought instruments with them to the area. Town bands such as the "Apostles Band" of Herman and the Concordia Band played a varied repertoire ranging from Patriotic tunes to operatic excerpts. The contribution of the bands to the educational programs and the development of appreciative audiences has been considerable.


"To Beat the Band." The Missouri Historical Review, XLII (October, 1946), 135.
BELLS IN MISSOURI

Several instrument makers settled in Missouri and have brought international fame to the state for their craftsmanship. The Stucksted Bell Foundry of St. Louis was established in 1853 and had by 1892 (from the 1892 copy of their catalog) cast and installed 311 bells in the state weighing some 435,000 pounds. There are listings of similar and larger installations throughout the United States. The company continued in operation until the beginning of World War II, when the bronze became scarce.


THE 'KING OF ZITHER MANUFACTURERS'

The Schwarzer Zither Factory of Washington, Missouri began manufacturing instruments in 1866 and before the demise of the company in the 1950's had built some 11,000 zithers, mandolins, and guitars. Franz Schwarzer called himself the "King of Zither Manufacturers" after he won the first prize at the International Exhibitions in Vienna in 1873 and 1883. The typical zither cost $180.00 and took 3 months to make. There is a display of Schwarzer's shop installed at the capitol in Jefferson City.


THE KILGEN WONDER ORGANS

The Kilgen Organ Company began its operations in St. Louis in 1870. This was a family organization which remained in business until the 1950's. Hundreds of Kilgens were installed throughout the nation, two of the important instruments are those of St. Patrick's Cathedral in New York built in 1928 and of the St. Louis Catholic Cathedral.


The Mario Salvadori Concert Series. Sacred Heart Program TMS 3-4. (Contains: Franck, Piece Herque; Campbell-Watson, Prelude II Fuer Natus Est; Schubert-Salvatore. Ave Maria; Bach, Gigue Fugue; Van Hulse, Festival Preludes on Veni Creator) (Recital played on the St. Louis Catholic Cathedral organ)

MUSIC EDUCATION AND TEACHING

Music has played an important role in the education of Missouri's children. The Missouri Harmony was an early day textbook, and J. L. Tracy's The American School Manual, or Juvenile Harp appeared in its 6th edition in an 1860 St. Louis imprint. Outstanding music educators in the state have included, in addition to Mr. Tracy, the Robyn family, Mabelle Glenn, and Alfred Bleckschmidt.

American Choral Review. (Since 1967, University of Missouri Press).


Missouri Journal of Research in Music Education. 1962

Missouri School Music. 1945-


MUSIC PUBLISHERS IN MISSOURI

The activities of individual music publishers in the State have been mentioned under their respective cities. In St. Louis we have the Balmer and Weber Company and the Kukel Brothers, in Sedalia the A. W. Perry Company, and in Kansas City the J. W. Jenkins' Sons Company. There have been numerous other publishers who have printed and distributed both popular and serious sheet music whose publications have been listed in the international sheet music bibliographies which are given here.


MISSOURI'S MUSICAL PERIODICALS

The leading bibliography of Nineteenth Century music periodicals lists some 11 as having been published in Missouri. The list follows this brief paragraph. Today there are a number of periodicals dealing with the field of music education and church music which are published in the State and these have been listed under their appropriate headings. During the earlier period a major portion of the periodicals were given over to musical compositions with only a few pages of letterpress.


   Kansas City, Missouri
   I-IV, No. 4 (April, 1895-October/November, 1897)/?
   Publisher: Knapp Printing Company
   Issuance: Monthly (later issues bimonthly)
   Editor: Robert Wizerde

32. THE CADENZA: Devoted to the Interests of Banjo, Mandolin and Guitar Players.
   Kansas City, Missouri
   I-XXXII, No. 2 (September/October, 1894-February, 1924)
   Publisher: The Partee Company
   Issuance: Bimonthly
   Editor: Clarence Partee
   (After 1900 place of publication moved to Boston)

48. COMPTON'S ST. LOUIS MUSICAL JOURNAL
   St. Louis, Missouri
   September, 1867/?
   Publisher: Compton and Dean
   Issuance: Monthly
   Editor: Not stated

83. GOLDBECK'S ART CRITIC OR MUSICAL AND GENERAL OBSERVER; A
    Biweekly Supplement to Goldbeck's Musical Art Monthly.
    St. Louis, Missouri
    I/2 (October, 1884/?)
    Publisher: Robert Goldbeck
    Issuance: Biweekly
    Editor: Robert Goldbeck

85. GOLDBECK'S MUSICAL INSTRUCTOR; Written and Published in the Interests of
    Teachers, Schools of Music, Singers, Pianists, Organists, and other Classes of Musical
    Performers, and the Musical World in General, with Contributions of the most
    Distinguished Musicians, Musical Writers and Teachers of America and Europe.
    St. Louis, Missouri
    I-II, No. 12 (April 15, 1882-March, 1885)
    Publisher: Robert Goldbeck
    Issuance: Monthly
    Editor: Robert Goldbeck
    (Later title: GOLDBECK'S MUSICAL ART... (April, 1883–)
ST. LOUIS

In 1904, St. Louis was the site of the Louisiana Purchase Exposition (a year late for the Centennial of the Purchase, but in time for the centennial of the Louis and Clark Expedition). Ice cream cones made their debut and a Ragtime contest sponsored by Thomas "Million" Turpin attested to the popularity of Ragtime piano playing. First and second prizes went to Black men, Alfre Wilson, up from New Orleans, and Charlie Warfield, from Chicago. A Musical Extravaganza by William Hall received 500 performances at the Exposition. Kansas City bands under the direction of Ben Kendrick performed there as did other bands from across the state. Edward Kreiser, organist of the Independence Boulevard Christian Church and Temple B'Nai Jehudah in Kansas City played many recitals on the huge Exposition organ, now housed at the Wanamaker Store in Philadelphia.


ST. LOUIS OPERA

The cover of the St. Louis Polka calls to mind the fact that much of the musical activity before the turn of the century took place in the ballrooms or a specially designed room usually called an opera house. In addition to opera productions performed by touring companies, orchestra, choral and chamber concerts were held in these early opera houses across the state. The river towns of St. Louis, Lexington, Kansas City and St. Joseph were considered good theater towns.


Carson, William G. B. St. Louis Goes to the Opera, St. Louis, Mo.: The Missouri Historical Society, 1946.


Krohn, Ernst C. The Musicians Guild of St Louis on its Fiftieth Anniversary, St. Louis: The Musicians Guild, 1965


AN EARLY ST. LOUIS MUSIC PUBLISHER

The Civil War song, Mother is the Battle Over (A sequel to Root's Just Before the Battle Mother) was written by Charles Balmer of the Balmer and Weber Music Publishing Company under the pseudonym of Henry Werner. Balmer was also an organist, serving for 46 years as organist at Christ Episcopal Church in St. Louis. The sub-title of Tell Them How Their Brother Fell, another Civil War song, indicates that it was sung by one J. A. Barney at Morrison's St Louis Opera House.

THESE MUSICAL ROBYS

One of the most prominent St. Louis musical families of the 19th century was the Robyn family. Henry Robyn, whose Belles of Missouri Quadrilles was published in St. Louis about 1848, was responsible with his brother William for organizing the first symphony west of Cincinnati. Henry was one of the pioneers in this country of the Braille Point System of writing and reading for the blind. He was responsible for inventing a press and a five-type system which made it possible for the blind to set type and print text and music in Braille Point.


THE ALPINE STORM

Charles and Jacob Kunkel, notable pianists founded one of Missouri's finest musical magazines, Kunkel's Musical Review began in 1878 and closed out publication 31 years later in 1909. Charles' most famous composition was The Alpine Storm with suitable descriptive captions.


RIVER MUSIC

Missouri's rivers have provided the transportation necessary for the early spreading of its population and culture, a role later taken up by the railroad and highway. Ragtime music and the Blues both supposedly "Came up the River" from Memphis and New Orleans. The Meeting of the Waters, statuary group by the Swedish sculptor Carl Milles, is representative of the attention given to the confluence of the Missouri and Mississippi Rivers. It is located in front of the St. Louis Union Station.


The River by Kansas City-born Virgil Thomson was written in 1937 for a documentary film of the Mississippi River. The opening theme, following the "Dixie" flourishes is the shape-note melody How Firm a Foundation. Another tune which figures prominently in The River is My Shepherd Will Supply My Need, also a shape-tone melody.


THE BLUES

Turning the clock back to 1914, the date of William C. Handy's St. Louis Blues, we find that the Eades Bridge framed the skyline in those days also.

The blues is a standard 12 bar chord progression with the poetic form of AAB.

Handy claims this is the first successful "blues" published — the chorus or Blues part is taken from an earlier piece for piano, The Jogo Blues.

The Institute's copy of Handy's Blues, An Anthology features an inscription by Handy and the illustrator Miguel Covarrubias to Dudley Murphy who made a film in 1928 called St. Louis Blues, one of the first "talkies."


THE ST. LOUIS SYMPHONY

The St. Louis Symphony, founded in 1880, claims to be the second oldest symphony orchestra in the U. S. In 1968, the Symphony moved into its first permanent home, the Powell Symphony Hall. Famous conductors of this orchestra have been Rudolph Ganz, Vladimir Golschmann, and, presently, Walter Susskind.


Krohn, Ernst C. "How Old the St. Louis Philharmonic?" Focus/Midwest, IV (1965), 4. 9.


Krohn, Ernst C. "The St. Louis Symphony and Its Conductors." Focus/Midwest, II (June, 1963), 16-19.


THE ST. LOUIS MUNY OPERA

The St. Louis Municipal, or Muny Opera was established in 1919 in a natural amphitheater in Forest Park where the Louisiana Purchase Exposition had been held.


"Melodies and Soft Shoes in Blackface." The Missouri Historical Review, XXXVIII (January, 1944), 192-199.


SEDALIA MAKES A SHOW

Sedalia's A. W. Perry Music Publishing House was founded in 1856 and the Perry's Musical Magazine, was started in 1881 and passed with the firm's closing about 1965. The Helen G. Steele Music Club in Sedalia began in 1893 and presently has some 250 members. The Sedalia Symphony, established in 1935 continues under the direction of Mr. Abe Rosenthal.


THE KING OF RAGTIME

Scott Joplin (1868-1917) is generally acknowledged as the "King of Ragtime." He was born in Texarkana, but by 1896 had found his way to Sedalia, playing in the Maple Leaf Club and taking courses in music at the George Smith College for Negroes. John Stark, a white music publisher, liked Joplin's Maple Leaf Rag, bought it and published it, thereby beginning a collaboration which took both of them to St. Louis. The New York Public Library has issued an edition of Joplin's works and there have been a number of his pieces recently released on records. There will be a Scott Joplin Festival in Sedalia on July 25-27, 1974.


SCOTT JOPLIN ON RECORDINGS

Max Mound Plays the Best of Scott Joplin and Other Rag Classics. Vanguard VSD 19/40.
Monster Concert. Columbia M 31726
Scott Joplin -- 1916. Biograph BLP 1006Q.
Scott Joplin Ragtime -- Vol. 2. Biograph BLP 1008Q.

SPRINGFIELD -- RADIO CITY OF COUNTRY MUSIC

The Country and Western music tradition is a logical outgrowth of the Ozark vocal and instrumental music of the turn of the century. Even though the center of broadcasting and recording has shifted to Nashville, the principal performers and writers began or furthered their careers in Springfield. The Ozark "Opera" is to be found throughout the state and young performers are still entering the field, some with "conservatory" degrees!


UP TO DATE IN KANSAS CITY

In spite of the fact that Kansas City (1850) is a younger town than St. Louis (1764) or its immediate neighbors, Independence and Westport, there has been a progression of music events there which are of interest. Scott Joplin's first rag, Original Rags, was published there and it is the home of Kansas City Jazz, Charlie "Bird" Parker, and Bobby Brookmeyer. Families such as the Cranstons, Rendinas, and the Jenkins have made an important contribution to Missouri's music.
One of the earliest Kansas City musical imprints is the Kansas City Schottische, published by Abram Kimmel in 1869. Many early concerts were held in Kimmel’s Music Room at his store.


Kennedy, Iyle. “105 Years of Opera in Kansas City” KC The Kansas City Magazine 1LXIII (September, 1973), 3031.


THE KANSAS CITY SPIRIT

The Kansas City Talking Machine Co. served as the distributor for Columbus Graphophones. Hattie Nevada, wife of the owner, Frank Woodbury, wrote The Letter Edged in Black one evening as a sort of “joke”. Mr. Woodbury published it in 1897 and distributed copies to his subsidiary dealers. Thousands of copies were sold as well as many cylinder and disc recordings of this piece. The song has even entered the folk and oral tradition.

Charles L. Johnson (1876–1950) whose Dill Pickle Rag and Powder Rag brought him fame, was a pianist who made a number of player piano rolls. This piece, The Belle of Havana Waltzes was published by J. W. Jenkins Sons in 1899 in at least 15 different arrangements. The composition, although a series of waltzes rather than marches, is cast in the same mold as ragtime pieces.

The Kansas City Spirit is a quality often mentioned across the country. A march by this name by Eugenio Sorrentino commemorates the rebuilding of Convention Hall in 90 days. The fire of April 4, 1900, destroyed the former hall erected just two years before. On July 4, the Democratic National Convention opened in the new building, nominating William Jennings Bryan to run for president. (McKinley won but was assassinated and Theodore Roosevelt became president.) Sorrentino’s Banda Rosa performed several sessions at Kansas City’s Electric Park (47th and Paseo), as did the Third Regiment Band (Hiner’s Band) directed by Dr. E. M. Hiner and Ben Kendrick.

Walter Fritschy and other impresarios scheduled hundreds of musical events in Convention Hall until the opening of Music Hall in 1936. Convention Hall was located on the southwest corner of what is now the Auditorium Garage. The Kansas City Lyric Theatre was established in 1958 to present opera in English under the direction of Russell Patterson. The Kansas City Starlight Theatre has given summer musicals under the stars in Swope Park since 1951.

THE TWELFTH STREET RAG

Moving a block north of the Auditorium to Twelfth Street we meet an old friend . . . The Twelfth Street Rag which sums up the night life along that famous street pretty well. This Rag, written by Euday Bowman in 1914, has become one of the best known rags of all time with the possible exception of Joplin’s Maple Leaf Rag.

In a sequel to the Twelfth Street Rag, The Pettycoat Lane Rag had its cover printed in pink symbolizing the ladies-wear shops located on 11th from Grand to Main, officially designated as Pettycoat Lane. John Taylor’s Store (now Macy’s) had as its advertising motto, “Just a step ahead on Pettycoat Lane.”

KANSAS CITY JAZZ

Whether it was because of prohibition or political corruption, big band jazz developed in the night spots of Kansas City. This was the era of prosperity of musical ideas based on the Blues which saw the rise of Bennie Moten, Andy Kirk, Count Basie, Cab Calloway, Jay McShann. Late comers on the scene were Charlie “Yardbird” Parker and Bobby Brookmeyer. By the coming of World War II, the golden era of Kansas City Jazz was over but there is a revival of interest among the musicians themselves to preserve the tradition along the lines of the preservation activities in New Orleans. The Charlie Parker Memorial Foundation, The Musicians Foundation, and the Kansas City Federation of Musicians are all working toward this end.

“Jazz Week’ Jives Up Town.” Variety, CCXXXVIII (April, 1965), 55.

“Kansas City Brass; Ed Lewis” Story as told to Frank Driggs.” Jazz Review, II (April, 1959), 28.

“Kansas City Group Mapping Jazz Hall of Fame.” Variety, CCLVI (October, 1969), 11.

“Kansas City Jazz Fans Make Marathon Bash a Hit.” Down Beat, XXXV (June, 1948), 14.


Quinn, J. “Third Annual Jazz Week, Another Click in Solid Kansas City.” Variety, CCLII (May, 1966), 195.


Wilson, J. S. "College Jazz — Post-Grad Style (Intercollegiate Jazz Festival)." High Fidelity, XVIII (September, 1960), 22-23.


Young, Henry. "Normour and Smith — A Brief Biography." JEMF Quarterly, VII (Spring, 1971), 31-34.

**KANSAS CITY JAZZ ON RECORDINGS**

Bobby Brookmeyer

Jay McShana
Going to Kansas City. The Jay McShann All Stars. Master Jazz Recordings MIR 8113.

Charlie "Yardbird" Parker

Count Basie

**KANSAS CITY PHILHARMONIC**

As early as 1886 attempts were made to form a Philharmonic orchestra in Kansas City. Sir Carl Busch, John Behr, Dr. N. DeRubertis, George Elliott Simpson, and Arnold Volpe each in his turn organized and directed orchestras. The Kansas City Philharmonic Orchestra was founded in 1933. Its conductors have been Karl Krueger, Efrem Kurtz, Hans Schwieger, and presently, Jorge Mester.

The Works Project Administration (W.P.A.) carried on extensive music programs in jazz and classical music during the 1930's.


Haskins, John. "Nonreview." American Musical Digest, I, 3 (1969), 15. This is a nonreview of a concert that did not happen.

Krueger, Karl. The Way of the Conductor. New York: Charles Scribner's Sons, 1958. (Mr. Krueger was conductor of the Kansas City Philharmonic Orchestra, 1933-1942).


**S.P.E.B.S.Q.S.A.**

In 1938 the Society for the Preservation and Encouragement of Barbershop Quartet Singing in America was begun as a result of two Tulsa business men who happened to cross paths in the Kansas City Muehlbach Hotel. The Society now has its headquarters in Kenosha, Wisconsin. The Institute for Studies in American Music has sponsored two Barbershop Quartet Workshops using the Heart of America Quartet Chorus directed by Don Webb.


**TEACHING LITTLE FINGERS (AND TOES) (AND EARS)**

John Thompson’s highly successful piano method books have initiated thousands to the thrill of having their little fingers taught to play the piano. He was a member of the faculty of the Kansas City Conservatory since 1917 and was its director from 1932-39. Jessie Caynor, Ernst Kroeger, Ernst Krohn, Wiktor Labunski have been powerful influences on Missouri’s music through their piano pupils. Organ teachers of note include Thomas S. Skinner, Luther Spade, Hans C. Feil, Powell Weaver and Edna Scotten Billings.

An addition to the very important area of private music teaching is that of instruction through example. Recitals and lecture-recitals conducted in small informal groups have shown their value as transmitters of musical enjoyment and education, i.e. informative performances, or inferences. These special programs are given regularly under the auspices of Young Audiences, Inc. throughout the State. Booking for the groups is provided through the offices of Young Audiences, Inc. in St. Louis and Kansas City. Although most of these programs are given in the public schools it is possible to book most groups for evening concerts for adult audiences as well.
SIR CARL BUSCH

Sir Carl Busch was an influential teacher, conductor and composer. Born in Denmark, he came to Kansas City in the 1880's where he was a shaping force in the musical activities of that city until his health failed in the 1930's. Among his distinguished pupils are William Dawson, Robert Russell Bennett (Broadway and movie composer-arranger), and Leith Stevens (movie and television composer-conductor).

Barney, Mildred Howard. Sir Carl Busch. Kansas City, Mo.: The University of Kansas City Press, 1942. (Based on material on deposit at the Library of the University of Missouri - Kansas City).


LEITH STEVENS

Leith Stevens was a 1927 graduate of the Horner Institute, an antecedent of the UMKC Conservatory of Music. He has a large number of film scores to his credit, including: Destination Moon, The James Dean Story, When Worlds Collide, Wild One and The Five Pennies. He also composed the scores for the TV series Mr. Novak and was music supervisor for Paramount Studios at the time of his death in 1970. His scores and records have been placed in the UMKC Conservatory Library. His family has also given his electronic composition equipment (Moog synthesizer, Yamaha organ, etc.) to the Conservatory.

LEITH STEVENS ON RECORDINGS

Destination Moon. Columbia CL 5151.
Exploiting the Unknown. R.C.A. Victor LPM 1025.
Hell to Eternity. Warwick W 2030.
The Interns. Capitol CP425.
The James Dean Story. Capitol W 881.
Jazz Themes for Cops and Robbers. Coral CRL 57283.
Jazz Themes from "The Wild One." Decca DL 8349.

THEY LOVED ME IN ST. JOE

Kansas City's place as a transportation center is symbolized in the Southern Belle song cover. The building of the Burlington bridge across the Missouri River caused a shift of commerce from St. Joseph to Kansas City. However, St. Joseph still has contributed one of the best known composers of our time — Katherine K. Davis. Her "Carol of the Drum" is one of the most popular Christmas songs, second only to "White Christmas." The St. Joseph Symphony, an area orchestra, performs under the direction of Russell T. Waite.

INDEPENDENCE

Independence is the hometown of President Harry S. Truman and the headquarters of the RLDS (now Saints) Church. Emma Smith, wife of the first President of the Latter Day Saints Church was concerned about the hymn texts for use in the new church. Her interest caused her to write and to request others to write hymns. These were published first in the Evening and Morning Star newspaper in Independence in 1831. The first hymnal for the church was issued in 1835, the most recent revision appeared in 1956.

Among the musical organizations of the Saints Church are the Auditorium Orchestra, the Messiah Choir and formerly, the Auditorium Chorales. In 1966, the Church commissioned composer David H. Williams to write a work On the Resurrection of Christ for the Chorale. The work was recorded and broadcast throughout the world.

THE FUTURE

The Future of music in Missouri is most promising. Within the educational framework the responsibility for developing and sustaining programs is clearly placed on the local school board. In higher education a number of innovative and imaginative programs are being developed. Extension musical services are available to any community in the State who wishes to use them. It is expected that the Revolutionary Bicentennial projects of many communities will include musical and theatrical activities.

There is a rising generation of potential performers and composers whose needs will have to be met through educational channels. But, perhaps more importantly, the future consumers of musical culture have educational needs which must be handled in the public schools in an active program of appreciation and understanding of the needs of informed listeners. The task is a large one — even if there were enough music educators to cover every class the job cannot be
managed. Music must be a part of the preparation of every teacher certified in the State. The ability to integrate music and all the arts in any subject should be developed. The love and appreciation of things cultural are the birthright of each citizen of the State. It is a matter of improving the quality of life for our citizens.

Missouri has been fortunate in having in its cultural heritage a number of musical leaders. For this we are thankful. Missouri has been blessed in having had generations of dedicated teachers who have brought our musical awareness to its present level. The future is in the hands of Missouri’s teachers whether music educators or general studies teachers who will shape and develop the cultural awareness through their own enlightened instruction and example.

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ORTHODONTIC TREATMENT AS A FACTOR IN THE SELECTION AND PERFORMANCE OF BRASS MUSICAL INSTRUMENTS

_Nell Bjurstrom — St. Louis, Missouri_

(This paper is based on the author’s doctoral dissertation of the same name presented as partial fulfillment for the requirements of the PhD degree at the University of Iowa, 1971.)

The subtitle “Buckteeth, Braces, and Brass” is frequently used by the writer in reference to his doctoral research area. This attempt at alliteration to avoid the somewhat pedantic title of the study, however, does describe the work accurately. Buckteeth, or protruding upper front teeth, is a common type of malocclusion. Braces, or orthodontic appliances, are used by dentists to correct poor teeth position. Many brass instrumentalists in school music programs wear or will wear such appliances. The pressures exerted on teeth and the function of embouchure during brass performance is of particular interest to dentists since controlled pressure on teeth is used to change their position. The physical discomfort and performance problems incurred by brass instrumentalists during orthodontic treatment is a source of concern to students, parents, and music instructors as well.

**THE PROBLEM**

In many areas of our country, youngsters wearing orthodontic appliances are commonplace rather than comparatively rare, as they were three or four decades ago.

The incidence of instrumental music students engaged in performance activities while receiving orthodontic treatment appears to be a steadily increasing factor in our school instrumental music programs. This trend is causing a corresponding growth in the number of questions asked of instrumental music instructors and musical instrument sales personnel about problems unique to this situation, not only by students who are anticipating or undergoing orthodontic treatment, but also by their parents. Many of these concerned students and parents have had an opportunity to read recent feature articles in magazines and daily newspapers proclaiming such information as “the choice of musical wind instruments can also help to prevent or correct orthodontic problems” or “proper orthodontic treatment might be helped by playing a wind instrument.” A caption below a picture of several school-age brass instrumental students accompanying one of these feature articles which was widely circulated nationally reads: “The Answer to a Tooth Problem? Play music to straighten them by.” The cover of a dental reception room magazine directs the reader “INSIDE: Music — and Its Importance to Dental Harmony.” And most recently a

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column headline in a metropolitan daily newspaper suggested "Brass instruments aid orthodontic treatment"* in a feature story that supposedly reviewed this writer's research. It would appear reasonable to assume that such information creates a desire for many of those involved in this situation to seek further professional advice.

Most published information regarding this unique problem is limited to the various national, state, and other specialized dental journals. The views of two dental authorities, Strayer and Kessler, writing in several of these dental journals, appear to have influenced recommendations made by many orthodontic specialists to their patients regarding the selection or playing of musical instruments. Strayer and Kessler stated that certain wind musical instruments can have positive or negative effects on particular types of orthodontic corrections, and, consequently, the wind musical instrument played by students involved with orthodontic treatment should be chosen accordingly. These articles also appear to be the basis for the previously mentioned newspaper and magazine articles directed toward the general public.

These same dental authorities have also expressed concern over evidence indicating that instrumental music instructors often make recommendations to their students regarding instrument selection in direct conflict with prevailing orthodontic theory. Kessler states in this regard:

As is known, some music teachers love to give a clarinet to a child with a severe Class II type of occlusion [lower jaw retracted in relation to the upper jaw and, frequently, protruding upper front teeth] because the mouthpiece "just fits." As a rule, this is one of the worst things that could be done to this child's dentition . . . This pupil would be better off with a trumpet or [a] trombone.**

It should be clearly stated at this point that it is not uncommon for instrumental music instructors to make recommendations to their students regarding a choice or change of instrument based on observations of these students' natural dentofacial conditions or embouchures. Such recommendations suggest their professional concern that a student's natural dentofacial condition be reasonably compatible with the mouthpiece of a specific musical instrument. This has been called by one dento-musical authority an embouchure of comfort.*** This concept stresses the importance of a wind instrument player gaining the maximum efficiency possible from his natural dentofacial condition. The desirability of maximum embouchure comfort is not only important, it is a basic premise to which instrumental music teachers devote considerable attention. This condition contributes to a student's individual musical achievement and, therefore, to his potential contribution to any performing groups in which he participates.

However, a student's involvement with orthodontic treatment concurrent with wind musical instrument performance introduces an additional factor which may in certain cases supersede any recommendation of an instrument based on that student's natural or existing dentofacial condition. These circumstances might also suggest a change of a previously selected instrument which is in apparent conflict with the student's orthodontic treatment and/or dental goals.****

Previously cited dental authorities recommended brass musical instruments to instrumental music students in a number of instances because of their potential contribution to the orthodontic correction of certain dental irregularities, especially those involving protruding front teeth.***** This opinion has been reinforced by recent research which reported that brass instruments do produce "significantly greater lingually [inner] directed pressure against the incisors [front teeth] than any other instruments."******

Unfortunately, students playing brass instruments while wearing orthodontic appliances also incur varying degrees of physical discomfort and performance problems unique to this situation. Such problems are reportedly more prevalent among these brass instrumentalists than those reported by students playing woodwind instruments under similar circumstances.*******

Problems of the music-orthodontia situation included (1) a deficiency of detailed information regarding problems incurred by brass students while wearing orthodontic appliances, (2) an apparent lack of understanding by some music instructors of the relationship between wind instrument performance and orthodontic treatment and goals, (3) insufficient communication procedures in school music programs among students, parents, dentists, and music instructors regarding orthodontic treatment as a factor in the selection, performance, and/or change of a musical instrument, and (4) a lack of data documenting the dimension or size and general characteristics of the music-orthodontia situation.

### NEED FOR THE STUDY

An exploratory investigation of orthodontic treatment as it related to the selection and performance of brass musical instruments provided (1) a collation of dental literature applicable to the subject designed specifically for the convenience: comprehension of instrumental music teachers; (2) data relating to the school grade levels at which the various phases of awareness to the situation occur as a guide to improving communication procedures; (3) data concerning the size and characteristics of the problem and the status of current communication among students, parents, music instructors, and dentists as potential indications of need for further research of the
SUMMARY OF RELATED LITERATURE

Concern for the potential positive or negative influence that performance of certain wind musical instruments could exert on the orthodontic correction of various types of malocclusion was first expressed by Strayer and reiterated by Kessler, two prominent orthodontic specialists and authors having a particular interest in the wind instrument-orthodontic problem. A significant feature of this concern was a recommendation that brass musical instruments could aid orthodontic correction of Class I malocclusion involving protruding upper front teeth and Class II, Division 1 malocclusion (Figure 1.), which is characterized by protruding upper front teeth and a lower jaw abnormally receded in relation to the upper jaw. Conversely, single reed instruments, particularly the clarinet, were strongly contraindicated in this situation. Other orthodontic specialists Heskin and Hospital, and Seidner reported agreement with Strayer and Kessler regarding these aforementioned recommendations. Engleman further contributed research data from a research project at Washington University, St. Louis in 1964, indicating that the inner directed force produced by brass instruments on the upper front teeth is considerably greater than that produced by either woodwind instruments or by maximum muscle pressure. He therefore advocated giving brass instruments particular consideration in the management of protruding upper front teeth.

Parker disagreed with the contention that single reed instruments should not be recommended for situations involving protruding upper front teeth. He contended that they were not a factor causing this protrusion. Parker, however, was in agreement with the mentioned body of orthodontic writers who postulated the value of wind musical instruments to certain orthodontic corrective efforts. They emphasized that the primary value of these instruments was in strengthening the desired lip and mouth muscles rather than their having an effect on the mesiodistal relationship of the teeth. Several authors noted the effects and value of these instruments during the retention period of the orthodontic correction process.

The desirability of certain dentofacial conditions as an aid to function (i.e., the performance of wind instruments, particularly brass instruments) was demonstrated by Cheney's research data from the University of Michigan. Cheney also indicated appropriate situations where orthodontic correction of dental irregularities was plausible and potentially valuable to wind instrument performance.

Figure 1. Angle’s Classification System of Malocclusion. From A. Hruby and H. Kessler, "Dentistry and the musical wind instrument problem," Dental Radiography and Photograpy, XXXII/1, 1959, 3. Used by permission.
Agreement with Cheney's findings and views was expressed by Seidner\textsuperscript{14} and Porter.\textsuperscript{25} Porter articulated and broadened many of these concepts into textbook proportion.

Information in the literature concerning the relationship of orthodontic treatment to wind instrument performance reveals that much of it is theoretical in nature. Research data upon which valid conclusions or definitive statements may be based are very limited. An investigation of the music-orthodontia situation in selected high school instrumental music programs was undertaken partially to obtain data, not previously existing, which would indicate the extent or size and general characteristics of the situation in these schools. These data, if warranted, would furnish additional justification and motivation for continued research of the music-orthodontia problem.

An analysis of the literature, however, does disclose certain areas of agreement. Orthodontic theorists and researchers agree that brass musical instruments merit consideration in orthodontic situations involving the correction of malocclusion characterized by protruding front teeth and/or a lower jaw abnormally receded in relation to the upper jaw. (A complete discussion of the dental authorities referred to may be found in the report of the writer's research project.)

**ORTHODONTIC THERAPY AS IT RELATES TO BRASS MUSICAL INSTRUMENTS**

Brass instrumental performance is directly related to the orthodontic corrective theory and practice because performance on a brass instrument is a source of extraordinary facial musculature activity and an extra-oral force upon the upper and lower front teeth.

The embouchure of brass players during performance involves tensing and shaping muscles of the mouth, lips, chin, and cheeks. Over twenty-two muscles are involved.\textsuperscript{26} A primary factor in this musculature complex is the orbicularis oris, the powerful muscle of the lips which completely circumvents the mouth. The lips function as the source of vibrations which are amplified and projected through the instrument. These vibrations result from breath being blown between the lips while they are held in a state of tension.\textsuperscript{37} The tension and conformation of these embouchure muscles is essential to the brass performer's range of pitches, intonation, tone quality, flexibility, and dynamic capability.\textsuperscript{28} These small muscles must accomplish all this with the strength and endurance to continue for several hours a day.

A brass instrumentalist also exerts inwardly directed force on the upper and lower front teeth during performance. The contraction of the mouth muscles acts as a protection to the brass player—a "defense against mouthpiece pressure"\textsuperscript{29} that is applied during performance in varying amounts. The amount or degree, the exact location and the duration of force varies according to the individual musician's manner of playing, the tessitura of the music being performed at any given point, the position, type, size, style, etc., of the cup-shaped mouthpiece being used, the length of the music being played, and the fatigue of the performer.

Many brass instrumentalists whose lower jaws are slightly receded thrust them forward to adjust the alignment of their teeth. The upper and lower front teeth held exactly in line enable "the upper and lower lips to be directly opposite each other, in an up and down consideration."\textsuperscript{30} It has been estimated by orthodontic authorities in the United States, writes Graber, "that approximately two thirds of the patients that undergo treatment have mandibular retrusion characteristics. Only 2 to 3 per cent exhibit mandibular protrusion."\textsuperscript{31}

Facial muscle function and extra-oral force on teeth are involved in the orthodontic corrective process and, therefore, are particularly relevant to brass instrumentalists who are receiving, contemplating, or have finished orthodontic treatment for malocclusion of the teeth. Authors of current orthodontic textbooks frequently reiterate the importance of the normal functioning of the orbicularis oris and other facial muscles to certain orthodontic correction and retention of malocclusion.

Orthodontic authors have thus theorized and, in some cases, presented limited research data that brass musical instruments can be of particular positive value to the orthodontic correction and retention of certain types of malocclusion. The basic value of these brass instruments to these situations, according to the orthodontic writers, is due to their ability to (1) stimulate the perioral musculatures as an aid to their normal or proper function, (2) utilize the desired anteroposterior jaw relationship conducive to corrective efforts of certain malocclusion, and (3) exert extra-oral lingually directed force or pressure on the upper and lower incisors during performance.

**PROCEDURE AND METHODS**

A series of preliminary interviews were held with a limited group of school-age brass instrumentalists who were undergoing orthodontic treatment. These interviews were an initial effort to gather current information regarding these students' orthodontic treatment as it might have been a factor in the selection of a musical instrument and of the various problems reportedly incurred by brass students in this situation. Such discussions with students yielded a wide spectrum of information from which the succeeding data-gathering procedures were developed.

An investigation was developed to gather valid data bearing upon two statements: Orthodontic therapy is a factor affecting students'
choices of musical instruments, and Playing brass musical instruments while wearing orthodontic appliances causes physical discomforts contributing to performance difficulties.

A determination was made by the investigator to utilize both a written questionnaire, to which a sample of instrumental music students involved with orthodontic therapy responded, and subsequent personal interviews restricted to the brass instrumentalists. This procedure functioned with a minimum of inconvenience to the students and school music staffs. Each of the data-gathering methods contributed uniquely to the investigation’s objectives, and, in combination, facilitated statistical procedures which ascertained the reliability and validity of the students’ responses.

The Sample of Instrumental Music Students and the Questionnaire

The first statement to be investigated, Orthodontic therapy is a factor affecting students’ choices of musical instruments, was formulated to provide an insight into the nature and state of communication among students, parents, dentists, and music instructors regarding the selection, change, or discontinuance of a musical instrument as it might involve orthodontic treatment. Additionally it provided indications of the magnitude and characteristics of the orthodontic-instrumental music situation in the school music programs sampled, e. g., grade level, age, sex, and instrument played.

Data for the investigation were obtained from a sample of elementary, junior high, and senior high school instrumental music students who were either undergoing or had completed orthodontic treatment. These wind, string, and percussion students were participating in the music programs of thirty-eight schools located in Iowa and Illinois. The sample, although selected so as to represent various geographic and socio-economic differences in students, was not a systematic attempt to provide categorical representation. An attempt was made to include in the sample all instrumental students who were involved with orthodontic treatment in each of the participating schools.

The Instrumental Music Student Questionnaire was formulated to gather data on this aspect of the investigation. The questionnaire served two purposes, (1) to provide general information on a selected sample of students, and (2) to provide a screening device to help select a subsample of brass players for personal interviews.

The questionnaire, a direct outgrowth and refinement of this investigation’s preliminary study, was designed to be student answered. A specific series of questions were formulated to be answered by selecting a response from a multiple-choice format. In addition, the opportunity existed for students to express their own, individual comments to each question. The project was specifically designed to facilitate anticipated aid from computer data-processing methods.

Sample of Brass Instrumental Students and the Individual Interviews

Certain physical discomforts are reportedly experienced by many brass instrumental students while wearing orthodontic appliances. The second statement of the investigation, Playing brass musical instruments while wearing orthodontic appliances causes physical discomforts contributing to performance difficulties, was formulated to gather information related to this unique problem. A determination was made by the investigator to obtain data relating to this situation directly from students who were involved in orthodontic treatment. It was felt that personal, open-ended communication would enable each brass student to discuss his unique experiences with the investigator, and thus furnish the study with a wide range of data.

Individual interviews were arranged and conducted by this investigator with 110 brass students who had previously answered the questionnaire. These students were wearing orthodontic appliances at the time of the interview or had worn such appliances previous to the interview. The interview was designed to elicit a wide range of responses from each individual student about his unique experiences as well as ensure responses about a variety of known or anticipated problem areas.

Follow-up Interviews

A series of follow-up interviews were held with a subsample of the brass students approximately twenty months after the first interviews. The intent was to inquire about any physical discomfort or performance difficulties related to orthodontic treatment these students might have experienced since the earlier interviews.

On the basis of a randomizing procedure, thirty of the original 110 brass instrumentalists were chosen for the follow-up interviews. Members of this subsample were interviewed by the investigator at their schools.

The questions posed to this subsample paralleled many of the questions used in the earlier interview. Specific areas of concern were (1) physical discomforts resulting from irritations of the inner lip and mouth tissue, routine adjustment of orthodontic appliances, and changes of appliance features; (2) performance problems such as range, endurance, tone, dynamics, tonguing, and lip accuracy or flexibility; (3) problems in performance groups and instrumental music lessons; and (4) performance problems resulting from the removal of fixed orthodontic appliances.
Reliability, Validity, and Computation of Data

The primary data for this exploratory survey were obtained directly from students involved in the subject under investigation who related their experience by means of written questionnaires and oral responses during individual interviews. A procedure was designed, which operated during these data-gathering efforts, to provide an indication of (1) the reliability of students' responses, and (2) the validity of these responses.

Reliability of Students' Responses

Reliability indices of students' responses were obtained by structuring parallel questions (1) within the questionnaire, (2) within the interview, (3) between the questionnaire and the interview, and (4) between the initial interview and the subsequent follow-up interview.

Parallel questions structured within the Instrumental Music Student Questionnaire were concerned with the school grade levels reported for the students' beginning orthodontic treatment, beginning instrumental instruction, awareness of orthodontic treatment at the time of instrument instruction, and explanation for a change of instrument.

Parallel questions structured within the individual interviews held with the brass students concerned physical discomfort factors such as inner lip irritation, bulk of the appliances, and periodic dental adjustment of orthodontic appliances; and performance factors involving range, span of performance, tone, tonguing, flexibility or accuracy, and dynamics. The consistency of students' responses to these sets of questions was computed and reported as reliability indices.

Brass students were asked to reiterate certain information during the interview which was originally requested from their questionnaires. Responses from the questionnaires and the interviews were also compared and reported as reliability indices. Similarly, during a follow-up interview held approximately twenty months later, students were asked to reestablish various experiences they had reported in the earlier interview. Reliability indices were then obtained by comparing students' responses reported during the two interviews.

The satisfactory level of consistency regarding the student responses obtained in the investigation is demonstrated by the following ranges of the reliability indices: internal consistency of the questionnaire, .88 to .96; internal consistency of the brass student interview, .97 to 1.00; consistency of questionnaire to brass student interview, .88 to .96; and consistency of the brass student interview to the follow-up interview, .87 to .88.

Validity of Student Responses

Various categories of information involved in the investigation as they pertained to individual students were validated by persons outside of the student sample, such as the students' parents, the instrumental music teachers, and the orthodontists. Parents were aware of the chronological sequence of their children's instrumental and orthodontic involvement, dental factors being corrected by orthodontic treatment, orthodontists' comments and recommendations regarding instrumental activity, and students' home practice habits and related difficulties. Instrumental instructors were aware of the students' instrumental performance difficulties in music instruction situations and in group rehearsals. Orthodontists were sources of information regarding factors involved in students' orthodontic corrective treatment and recommendations made to students regarding instrumental selection or performance. Information obtained from students was verified by comparing it to data received from these sources. The range of indices obtained by the comparison of such data was from .83 to .97. The investigator was satisfied that the basic experiences reported by the students were credible for the purposes of this exploratory survey.

Coding and Computation of Data

The questionnaire used to survey the sample of instrumental music students involved with orthodontic therapy was designed to facilitate machine data-processing.

Data obtained from the interviews and follow-up interviews with the brass students were recorded by the investigator on a specially designed response tally sheet. A code system was developed to record many of the responses and to facilitate the transposition of much of the information to a quantitative form for data-processing. Individual answers by students which could not be coded, or when coding was not desired, were recorded verbatim, paraphrased, or summarized in appropriate topic categories on the response tally sheet.

An IBM S/360 Model 50 computer was used to process the data. The specific system of computer subprograms found to be especially appropriate for the variety of survey data obtained in this investigation is called SPSS or Statistical Package for the Social Sciences.12

SUMMARY OF DATA

The investigation sought to examine orthodontic therapy as it is a factor or consideration in the selection of musical instruments — particularly brass instruments — and to document various problems incurred by brass students wearing orthodontic appliances.
An examination of the dental literature applicable to the wind instrument-orthodontia situation reveals substantial agreement among dental authors that performance on brass instruments can be beneficial to the orthodontic treatment of certain malocclusions involving protruding front teeth and/or a receded lower jaw. However, only a limited amount of actual research data is available to substantiate the opinions of these dental sources and recommendations based upon them. A concern of this investigation was to furnish data concerning the dimensions and nature of the wind instrument-orthodontia situation which might justify or motivate continued research of the problem.

**Frequency of Instrumental Music Students Involved with Orthodontic Therapy**

Insights into the size, nature, and other general characteristics of the wind instrument-orthodontia situation were obtained by investigating the statement, *Orthodontic treatment is a factor affecting students' choices of musical instruments*, in thirty-eight public school instrumental music programs located in Iowa and Illinois. Approximately 20 per cent, or 535 students of the 2,754 instrumental students surveyed in this project, was or had been involved with orthodontic treatment.

It is interesting to note that the wind instrument-orthodontia situation was not unique to students living in the large city suburban area included in the investigation. The percentage of students involved with orthodontic treatment in instrumental music programs located in Iowa communities such as Davenport, Iowa City, West Branch, Tipton, et al. (18.2 per cent) was generally similar to the percentage indicated for students in Chicago, Illinois suburban communities such as Evanston, Northfield, Des Plaines, Winnetka, Park Ridge, et al. (19.6 per cent).

A predominance of girls or of boys did not exist in the sample group. Involvement of an equal amount of boy and girl instrumentalists with orthodontic treatment can be anticipated.

**School Grade Levels of Students Involved with Instrumental Music and Orthodontic Therapy**

Although cases were reported of students beginning their orthodontic treatment at every school grade level from the first grade to the eleventh, most of the students surveyed began to wear fixed orthodontic appliances in the period from the fifth to the eighth grade, and they wore appliances for about two years (Table I). These data indicate that the wind instrument-orthodontia situation existed, in these schools, most frequently in the late elementary grades and particularly in the junior high school. The percentage of students
## TABLE I

**COMPARISON OF BEGINNING ORTHODONTIC TREATMENT TO BEGINNING OF INSTRUMENTAL MUSIC INSTRUCTION BY SCHOOL GRADE LEVELS**

<table>
<thead>
<tr>
<th>School Grade Levels</th>
<th>Iowa Schools</th>
<th>Chicago Suburban Schools</th>
<th>Total Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beginning orthodontic treatment</td>
<td>Beginning instrumental instruction</td>
<td>Beginning orthodontic treatment</td>
</tr>
<tr>
<td>1</td>
<td>1.1</td>
<td>0.5</td>
<td>1.1</td>
</tr>
<tr>
<td>2</td>
<td>2.7</td>
<td>0.0</td>
<td>2.1</td>
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<tr>
<td>3</td>
<td>3.3</td>
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</tr>
<tr>
<td>4</td>
<td>8.7</td>
<td>25.1</td>
<td>6.3</td>
</tr>
<tr>
<td>5</td>
<td>20.2</td>
<td>55.7</td>
<td>9.6</td>
</tr>
<tr>
<td>6</td>
<td>23.5</td>
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<td>20.2</td>
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<td>4.4</td>
<td>31.4</td>
</tr>
<tr>
<td>8</td>
<td>13.1</td>
<td>0.0</td>
<td>13.4</td>
</tr>
<tr>
<td>9</td>
<td>4.9</td>
<td>0.5</td>
<td>8.8</td>
</tr>
<tr>
<td>10</td>
<td>2.2</td>
<td>0.0</td>
<td>1.4</td>
</tr>
<tr>
<td>11</td>
<td>0.5</td>
<td>0.0</td>
<td>1.1</td>
</tr>
<tr>
<td>12</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Total Cases</td>
<td>(183)</td>
<td>(183)</td>
<td>(352)</td>
</tr>
<tr>
<td>Per Cent of Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>
wearing appliances decreased proportionately during the senior high school years. It must be emphasized that, although wearing fixed appliances for approximately two years was the mean length reported by students in the survey, students reported wearing fixed appliances for a period ranging from less than one year to almost four years. Each case has its unique requirements, and, thus, its individual timetable.

Students indicated that they tended to choose and to begin instruction on musical instruments before they began to wear fixed orthodontic appliances, e.g., 80 per cent of the sample group began instrumental instruction by the fifth grade level as compared to 27 per cent of the group who had begun orthodontic treatment at the same grade level. However, it must be noted that about half of the total sample of students (46 per cent) stated they were aware of forthcoming orthodontic treatment at the time they selected an instrument. This awareness was due in part to students’ preliminary visits to orthodontists (83 per cent) and family discussion of orthodontic treatment.

Instruments Selected by Students Involved with Orthodontic Treatment

Students involved with orthodontic treatment did not appear to favor any particular type of instrument according to data based on the total sample of 535 students. The types and frequencies of instruments played by the sample group were similar to what might be found in any school instrumental music programs. It is interesting to observe, bearing in mind the recommendations of dental writers previously cited, that students reporting protruding front teeth as a factor in their orthodontic treatment did not appear to favor any particular type or category of instrument, e.g., of students reporting protruding front teeth as a factor in the malocclusion, fifty-six students played clarinet and fifty-three students played trumpet/cornet.

Advice or Comment Based upon Orthodontic Rationale Made to Instrumental Music Students Involved with Orthodontic Treatment

A minority of students (21 per cent) reported receiving advice from parents, orthodontists, or music instructors concerning instrument selection based on an instrument’s potential effect on orthodontic treatment.

The recommendations of the dental writers cited in previous sections of this report regarding the consideration of certain instruments for their value in an orthodontic situation appears to be a rather small factor in the total pattern of advice given to students. Data indicate that only fifty-eight students in the sample (11 per cent) reported receiving advice from orthodontists regarding instrument selection. However, there were indications that parental advice to students often reflected the advice given to parents by orthodontists. Influence of this advice is possibly reflected by the instruments students played. For the total sample of 535 students, 31 per cent elected to play brass instruments. Of students in the total sample who (1) reported being aware of forthcoming orthodontic treatment at the time they selected an instrument, and (2) reported having protruding front teeth as a factor in their orthodontic treatment; sixty students or 42 per cent elected to play brass instruments. The larger percentage of students playing brass instruments in the latter group is perhaps an indication of recommendations given to them by their orthodontists and parents based upon an orthodontic rationale. This group consisted of students most likely to benefit from brass instrument performance according to the recommendations of formerly cited orthodontic writers.

A change of instrument for reasons relating to orthodontic treatment was reported by eighteen students (3 per cent). Of these students, four reported changing from a single reed to a brass instrument at the request of their orthodontists.

Physical Discomforts and Performance Difficulties

An examination of the statement, The playing of brass instruments while wearing orthodontic appliances causes physical discomfort contributing to performance difficulty, indicated that such an inter-relationship of problems was reported by 96 per cent of the brass students wearing fixed appliances.

The physical discomforts reported by students can be grouped basically into three categories: (1) irritation of inner lip and cheek tissue and the tongue by appliances during brass performance, (2) general mouth pain or sensitivity resulting from the periodic adjustment of appliances, and (3) disturbance of the embouchure or mouthpiece setting and hindrance of muscle functions due to the bulk or physical presence of appliances.

Irritation of Inner Lip, Cheek, and Tongue Tissue

Mouthpiece pressure and the action of the facial muscles used in brass performance cause mucous tissue to come into contact with orthodontic appliances. This situation produced pain and irritations to 96 per cent of the brass students immediately after the application of fixed appliances (Table II). Conditions were reported to improve partially in succeeding months. After wearing appliances for six months, 54 per cent of the brass students reported lip irritations. After one year, 46 per cent of the students continued to report this problem.
Data from the brass players who wore their appliances while in high school indicated that after one year 75 per cent of the particular students continued to report problems with lip irritations. This situation suggests that certain conditions more commonly experienced by players at a high school performance level, such as higher tessituras and more frequent and longer performance periods than might be experienced in lower school grades, contributed to the severity of a student's problem with lip irritation.

Data obtained from a subsample of brass students, concerned with their experiences wearing appliances for a period longer than one year, revealed that half of these students continued to report lip irritations as a problem of varying degrees during the entire time they wore fixed appliances.

An interesting aspect of the inner lip irritation problem was that many players of the various types of brass instruments seemed to share the problem. Students playing instruments with large cup mouthpieces as trombone, baritone, and tuba, often reported problems in a similar manner as students playing on smaller cup mouthpieces as trumpet, cornet, and French horn. However, of particular interest were the comments from students who changed from the smaller cup mouthpiece instruments to larger cup mouthpiece instruments, primarily to reduce lip irritation. All reported some degree of success in this endeavor. These particular students mentioned that they were able to alter their mouthpiece positions during the change-over process so as to minimize the mouthpiece rim-orthodontic appliance impact area.

Canker sores contributed to some students' lip irritations. These sores, occurring at locations irritated by appliances, added to the discomfort of 47 per cent of the brass sample.

The temporary dislocation of various connecting wires (metal ties or ligatures) used as part of the appliances were also reported to cause irritation of inner mouth tissue. Pain from such situations frequently necessitated discontinuance of performance activity by a student until his orthodontist could correct the condition.

Brass performers who reported using above average mouthpiece pressure reported more severe lip irritation, as a group, than was common for the total sample of brass students. Students who wore appliances on both the top and bottom teeth usually reported the discomfort or irritation to be more severe on the top lip. Appliance features that involved sharp protrusions in the vicinity of the mouthpiece rim-lip impact area as hooks, spurs, springs, et cetera, always created greater discomfort for the individual student.

### Aids to Reduce Inner Lip Irritation

Efforts were made by students and their orthodontists to reduce the lip irritations caused by orthodontic appliances. One method consisted of applying some sort of buffer or cushion between the

### TABLE II

<table>
<thead>
<tr>
<th>Severity Rating</th>
<th>1st Month</th>
<th>2nd Month</th>
<th>6th Month</th>
<th>12th Month</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severe pain plus bleeding</td>
<td>(17)</td>
<td>(8)</td>
<td>(1)</td>
<td>(1)</td>
</tr>
<tr>
<td>Severe pain</td>
<td>39.8</td>
<td>17.3</td>
<td>6.5</td>
<td>5.4</td>
</tr>
<tr>
<td>Moderate pain</td>
<td>(24)</td>
<td>(26)</td>
<td>(21)</td>
<td>(13)</td>
</tr>
<tr>
<td>Slight pain</td>
<td>10.8</td>
<td>29.0</td>
<td>23.7</td>
<td>25.3</td>
</tr>
<tr>
<td>No pain</td>
<td>(5)</td>
<td>(18)</td>
<td>(43)</td>
<td>(50)</td>
</tr>
<tr>
<td>Total Cases</td>
<td>(93)</td>
<td>(93)</td>
<td>(93)</td>
<td>(93)</td>
</tr>
</tbody>
</table>

**Per Cent of Cases**

<table>
<thead>
<tr>
<th>1st Month</th>
<th>2nd Month</th>
<th>6th Month</th>
<th>12th Month</th>
</tr>
</thead>
<tbody>
<tr>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**NOTE:**

1. All cases included in this table and in other tables concerned with the relationship of orthodontic appliances to difficulties incurred during brass instrument performance consisted of students wearing fixed appliances or non-removable plates with bow wires. These appliances were located, on both top and bottom teeth (77 per cent), top teeth only (20 per cent), and bottom teeth only (3 per cent). All cases reported in the table involved appliances consisting of arch or bow wires attached to dental bands (28 per cent), along with appliances that included these features plus attachments for elastics, springs, and head or neck gear (72 per cent).

2. No differentiation was made for styles of arch wires or brackets in the table.

3. Removable appliances and types of fixed appliances located in mouth areas remote from conflict with brass performance were not included in the table (seventeen cases were removed from the sample of 110 brass student sample creating a refined sample of ninety-three cases).
appliance and the lip. The most common material used as a cushion between the inner lip and appliances was dental wax. Dental wax was the only material reported to have achieved any degree of success as a buffer in reducing such irritation. Although this “success” was reported with mixed results, the students did state that the dental wax was, at least an alternative to greater pain, or, as they would say, “It was better than nothing.” A substantial number of brass students mentioned not being aware of dental wax as a potential comfort aid.

A negative aspect of the use of wax was the addition of bulk to the appliance, a persistent problem by itself. The soft dental wax is also very pliable at mouth temperature making it very susceptible to the mouthpiece pressure which wears through its protective shield. Other negative features of wax mentioned by students involved hygiene, appearance, displacement, inconvenience, and entanglement in the appliances.

In another method to reduce discomfort, the orthodontist polished or contoured the edges of the appliance to minimize irritations caused to inner lip and other mouth tissues. Students reported that this technique did reduce irritation considerably.

Discomfort from Appliance Adjustments

Discomfort, of a nature other than the irritation resulting from appliance-tissue contact, was experienced by most all students immediately following the periodic or routine adjustment of their appliances. The mouth area, or more specifically, the teeth, gums, and jaws, were very sensitive at this time to any environmental pressures, particularly the mouthpiece pressure of brass performance. Many students found it necessary to discontinue performance for a day or two at this period. Most of those students who did continue to play reported it to be very uncomfortable. Appliance adjustments generally occurred every three to five weeks for the entire period students wore fixed orthodontic appliances. The actual days of discomfort for an individual student at any given occurrence would be contingent upon the exact nature of the orthodontist’s adjustment. Although the period of discomfort reported by brass students ranged from one to seven days, two or three days was most common.

Interference of Appliance Bulk to Brass Embouchure and Muscle Function

The initial application of orthodontic appliances to a brass performer’s teeth abruptly changes the embouchure condition to which the player has been accustomed. This problem was experienced by a majority of the brass students (78 per cent) and was particularly evident during the first months of the student’s orthodontic treatment. After a six month period, however, three out of every four players reported becoming adjusted to the situation.

The remaining students who continued to experience such difficulties needed up to three years to become completely adjusted to the situation.

Performance Difficulties

The various physical discomforts incurred by brass instrumentalists wearing orthodontic appliances frequently manifested themselves, according to the students, in various performance difficulties. Immediately following the application of orthodontic appliances, most brass players reported (1) an abrupt reduction in the length of their performance routine due to pain and fatigue, (2) difficulty with “high notes,” (3) a deterioration of tone quality, and (4) less lip flexibility or control. Other difficulties which occurred less often involved (5) volume control and (6) tongueing or attack. The patterns of severity and frequency of these performance difficulties paralleled the patterns reported for the physical discomforts. The performance difficulties tended to improve in the succeeding months after the initial setbacks. However, it must be emphasized that these problems and patterns of improvement are contingent upon the unique features of each student’s appliances and the exact nature of each student’s performance circumstances. Some students experienced problems of range, poor tone, and the necessity to shorten and alter their performance routines throughout most of the time they wore appliances. In some cases, this period lasted from three to four years.

The various types, frequency, and severity of performance difficulties were shared similarly by students playing French horn, trumpet/cornet, and trombone. Tuba players, although reporting similar physical discomforts as brass players of the aforementioned instruments, appeared to experience fewer performance difficulties.

The thirty brass students who were playing in senior high school musical organizations during the period they wore appliances reported considerably higher degrees of severity and frequency of physical discomfort and performance difficulties than did the brass sample as a whole.

Alteration of Lessons, Practice, and Performance Group Situations

Approximately one third to one half of the brass players temporarily discontinued home practice, individual lessons, and band/orchestra rehearsals for a few weeks immediately after the application of the appliances due to the discomforts they experienced. Of those students who did report attending rehearsals of school groups during the period immediately following the application of orthodontic appliances, many said they played a minimum amount of time and/or rested frequently, if they played at all. It was not uncommon for a student to mention changing positions within the performance group to a position which made
less technical demands on him, i.e., musical parts which were more in keeping with the performance limitations imposed on him due to wearing orthodontic appliances.

Removal of Orthodontic Appliances

Perhaps the final musical problem that brass students are likely to encounter during their orthodontic treatment is the situation created when their appliances are removed. The embouchure must readjust to the feel and dimensions of the natural teeth causing immediate performance difficulties for many students. No pain was associated with the problem, however, frustration was commonly reported. The problem, as it negatively affected performance, was reported to last only a week or two for most students except for players who began their instrumental performance after they began wearing orthodontic appliances. Those players all reported taking a longer period of time to adjust to their embouchures which were unadapted by orthodontic hardware for the first time in their performance experience.

CONCLUSIONS AND RECOMMENDATIONS

Orthodontic Treatment As a Factor Involved in the Selection of Brass Musical Instruments

A review of dental literature pertaining to the orthodontia-wind musical instrument situation points to the desirability of communication among students, parents, dentists, music instructors, instrument sales personnel, et cetera, in regards to students’ selection and performance of wind instruments as related to these students’ orthodontic treatment. Such communication could contribute to both the students’ dental and musical well being. Yet, an investigation of such communication among the persons mentioned reveals this communication to be minimal. A need exists for its improvement. Only a minority of students involved in the orthodontia-instrumental situation reported receiving advice pertaining to instrument selection based on an orthodontic rationale of any kind from any source, and an even smaller number of these students reported that such advice came from dentists. The substantial group of students who potentially could benefit from such improved communication is illustrated by data indicating that one of every five students in the school instrumental programs investigated were or had been involved with orthodontic treatment.

Orthodontic Treatment As a Factor Contributing to Brass Instrumental Performance Problems

Findings of the investigation indicated that most students playing brass instruments while wearing orthodontic appliances incurred a variety of physical discomforts which were detrimental to their musical performance. Such discomforts can best be described as irritations of inner mouth tissue, pain resulting from periodic adjustments of orthodontic appliances, canker sores or more frequent canker sores, and interference with muscles in the dentofacial area used in brass performance. These various physical discomforts, singly, and in combination, contributed to performance problems for the brass players involving range, length of performance, tone quality, accuracy, tonguing, volume, and mouth-piece placement.

Problems tended to be most severe in the months immediately following the application of the brass students’ orthodontic appliances. Except for pain resulting from periodic appliance adjustment, the various problems generally improved in succeeding months and years for many students, although there were some instrumentalists who continued to experience various difficulties for much of the period that they wore fixed appliances. The recurring pain resulting from the periodic adjustments of students’ appliances and its negative influence on performance usually paralleled the period such adjustments were necessary. This was often reported to continue for the entire period students wore fixed appliances.

The various interrelated physical discomforts and performance problems were generally indicated to be detrimental to the students’ performance activities such as individual practice, music lessons, and band/orchestra participation. High school brass students, in particular, reported problems to be more severe than were reported by the total sample of brass players. This particular situation was probably due to the length and frequency of their performance activities and to the advanced technical nature of the music they played.

The use of dental wax was reported to be helpful in reducing irritation of inner mouth tissue curing brass instrumental performance. Although dental wax was reported to have certain inherent shortcomings that detract from its use and effectiveness, which students readily discussed, approximately one third of the students were unaware of wax as a comfort aid. Students should be encouraged to discuss its potential use with their orthodontists.

Each of the several students whose orthodontists polished or contoured the metal surfaces of the appliances reported this technique to be effective in reducing inner mouth irritations.

All problems did not end, as many brass instrumentalists anticipated with the removal of their fixed appliances. This situation merely signaled the beginning of a varying period when students’ embouchures had to readjust to the feel and dimensions of the unadapted teeth. This caused immediate performance difficulty for many students, although no pain was associated with the problem. Readjustment was most difficult for students who began instrumental music activities while wearing fixed appliances, and
instructors are cautioned to be particularly cognizant of this problem.

**Recommendations Regarding Music Instructors**

Music instructors responsible for the recruitment and development of beginning school instrumental music programs are in a particularly favorable position to initiate communication among students, parents, and orthodontists regarding instrument selection.

When the instructor knows a potential relationship can exist between a student's musical instrument performance and his orthodontic treatment goals, he can recommend to students aware of future orthodontic treatment, and to their parents, that they consult with their orthodontists before deciding upon a particular instrument. Advice at the time of instrument selection would lessen the potential of the orthodontist's recommending a later change or discontinuance of an instrument which was inappropriate to a student's specific orthodontic treatment, though a considerable investment of effort and money has already been made. The music instructor may include a brief paragraph in the literature usually distributed to parents during the formation of beginning school instrumental music programs suggesting:

In the event you are contemplating orthodontic treatment for your child, it is strongly recommended that you seek the advice of your orthodontic specialist in regard to the selection of a musical instrument. Your orthodontist or dentist can then determine to what extent the choice of instrument should be influenced by your child’s specific orthodontic situation.

**Recommendations Regarding Students Wearing Orthodontic Appliances**

Many brass instrumentalists who begin to wear fixed orthodontic appliances are abruptly confronted with the variety of problems previously discussed. This beginning period is also the time at which these problems seem the most frequent and severe, contributing to a situation that is frustrating and demoralizing for many of the students involved. Music instructors cognizant of these problems can be a valuable source of guidance to students in this situation by being aware, sympathetic, knowledgeable, and helpful regarding the unique problems likely to be incurred during orthodontic treatment. A music instructor can help the student anticipate problems likely to be encountered and provide some insight as to their nature, severity, and duration. The instructor can be alert to the student's individual circumstances and suggest modifications of the student's instrumental activities in an effort to at least minimize problems which do occur.

**Recommendations Regarding Comfort Aids**

The reported shortcomings of dental wax as a comfort aid suggest the need for the development of a device that could conveniently be placed over the teeth and appliances. It should be as thin as possible to minimize bulk, but yet contribute some degree of protection to guard the lip against the abrasive action of the appliances. The device should remain secure during performance yet be convenient to place and remove.

The polishing or contouring of orthodontic appliance features was also reported to lessen irritation caused to inner mouth tissue during brass performance. However, very few students reported having such polishing done. It would appear appropriate to suggest that brass students be encouraged to take the initiative and articulate their unique discomfort problems to their orthodontists. Perhaps they should take their mouthpieces to their dental appointments to demonstrate difficulties. Unless there is such dialogue, an orthodontist may not be aware of the intensity of students' problems. The orthodontist can then determine the potential benefits of wax or polishing of the appliances.

**Recommendations Regarding Continued Research**

Data obtained by the investigation should provoke conjecture as to the total magnitude of the wind instrument-orthodontia situation in our schools. Of the instrumental music students investigated here, 20 per cent wore orthodontic appliances. This may illustrate the need for long range research efforts to supplement current information that is largely theoretical. Dental researchers have documented the forces or pressure that brass instrument performance can exert on teeth. Dental writers have theorized and are in agreement that brass instruments can be beneficial to the orthodontic correction of certain types of malocclusion. However, the investigation could not locate any data from actual cases of orthodontic correction which documented benefits derived from brass instrument performance, or, conversely, that performance on single reed instruments was harmful to certain orthodontic goals. Data are also lacking which document the effects wind instruments might have, positive or negative, upon the retention of students' occlusions after orthodontic treatment ends. In this regard, it should be noted that brass students reported increasing the amount of performance time on their instruments from elementary school to high school by 269 per cent. This increased amount of performance time implies a corresponding increase in the amount of force exerted on the teeth by a wind instrument. Such an increase of force could have implications regarding malocclusions orthodontically treated.

It would appear that an appropriate future phase of the wind instrument-orthodontia situation would involve long range, or longitudinal, cooperative research programs by interested teams of
orthodontists and music instructors. Such research efforts could perhaps compare the progress, effectiveness, and retention of orthodontic cases involving similar types of malocclusion between students playing various wind instruments and between these students and students who do not play instruments. The difficulties of such research with the array of variables inherent in this situation are indeed recognized by the investigator. Well-documented results from such research would enable instrumental music teachers to more effectively assist their students involved with orthodontic therapy.

Footnotes


17. Strayer, op. cit., 18-17.


27. Ibid., 10.


29. Ibid., 15.

30. Ibid., 7.


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THE SIGNIFICANCE OF THE WIND ENSEMBLE IN AMERICAN MUSIC EDUCATION

Donald Gephart
Washington University

The Wind Ensemble

The wind ensemble is a performing organization which is having more and more influence in American music education at all levels from conservatory to elementary school. Since 1952 the term wind ensemble has been used to describe wind performing groups of approximately 30 to 65 players. The term was first used by Dr. Frederick Fennell when he organized a group of winds at the Eastman School of Music, Rochester, New York, and used it to describe the new ensemble. Since then, the ideas and concepts which began to have significance in the areas of wind performance and the education of wind performance groups. It is the purpose of this paper to examine the wind ensemble and this relatively new philosophy in regard to music and music education of the past, to determine its status at present, and its possible growth in the future.

Major Trends Prior to the Wind Ensemble

In order to view the wind ensemble in perspective it is necessary to examine the course of instrumental music in America on a professional, amateur, and educational level. This is not intended to be a complete history of instrumental music, but a highlighting of events pertinent to music education and wind music.

For many years in the area of art music, America had to import professional talent from Europe. Even after American orchestras were established, they relied heavily on European performers to fill their ranks. Only in this century, and especially after World War I have American players generally reached a level of performance adequate to or surpassing that of their European counterparts. America is now the place to study music. Much of the credit for this is due to the inclusion of instrumental music in the curriculum of the public schools, and of course, the establishment of professional conservatories of music and departments of music in colleges and universities.

"Organized instrumental music first made its appearance in America at the turn of the 19th century when Gottlieb Graupner, a German immigrant, arrived in America and immediately set himself to the task of building an orchestra in Boston. His mastery of the oboe, piano, clarinet, and string bass equipped him with sufficient musical knowledge to attract capable musicians to his organization. By 1882, his orchestra was giving regular public performances. These pioneering efforts by Gottlieb Graupner earned him the title of "Father of the American Orchestra" and eventually led to the organization of the Boston Symphony Orchestra."

On the amateur level many groups and societies became active in organizing and giving concerts such as the Handel and Haydn societies in Boston and the Moravians. Some of the earliest performances of Mozart and Haydn are attributed to the Moravians who also organized a trombone choir, and performed music of their own composers. Bands made an early appearance—as early as 1773, J. Flagg established a band in Boston but there is no record of how long it survived.

The first service band was the Marine Band which was established in 1798.

"... which at the turn of the century was composed of two oboes, two clarinets, two horns, a bassoon, and a drum. The usual size of the early American bands was between eight and fifteen players, with an instrumentation similar to that of the U.S. Marine Band."

1853 marks the first truly professional band which created interest in America. This was organized by Antoine Jullien, the son of a French bandmaster, who came to the United States and organized a band of European musicians who had fled to America following the revolutions in Europe in the 1840's. This band presented spectacular concerts and greatly influenced Patrick Gilmore, who became a greater showman than Jullien. The Gilmore band and his successor, John Philip Sousa, who organized his first professional band in 1892, made the band an American tradition and supplied needed entertainment in this period of American history. The professional bands likewise spurred the founding of many amateur community bands across the country, which became recreational outlets for those involved. The Sousa era came to an end about 1925 with the advent of radio, the phonograph, movies, and the automobile, which marked the demise of the amusement parks, the mainstay of the band's employment. In addition the rising popularity of jazz and dancing to jazz aided in the decline of the larger bands, which had also played for dancing.

The first college bands date back to the early 1800's, and were usually associated with military activity. Both Harvard and Yale had bands around 1827, but these only existed for a short time. The early bands were brass bands—the woodwinds began to be included around 1890.
success of vocal music and also because of the philosophy of pragmatism expressed in progressive education. With progressive education the school expanded and many new courses were added to the curriculum. The idea of musical instruction was in keeping with the progressive spirit.  

"As the school sought to duplicate community life within its walls (even to student newspapers and governments), the firehouse band moved into the school house, just as did the singing school in 1883."  

The orchestra was the first instrumental performing group established in the schools, but it was soon joined by the band and overshadowed by the band. There were several reasons for this development. Basically they were:  

1. Adaptation of class instruction to the teaching of instruments — The Maidstone Movement — started in England in 1808 and brought here by Albert Mitchell in 1911.  
2. Greater flexibility of the band — greater usefulness to the community and to athletics. The band could perform parades, rallies, at games, and at concerts. Greater appeal to youth.  
3. Music contests — involvement of youth in a competitive activity. These grew to a national level by 1928. Whereas 30 bands participated in 1923, 1,949 schools took part in regional contests by 1940. These were curtailed in World War II due to travel restrictions.  
4. Social aspects of music. Music educators using the slogan "If you teach a boy to blow a horn, he'll never blow a safe" to sell music education to the public. Basically the philosophy expressed in the Music Man, of Meredith Willson.  
5. Commercial interests boosting instrumental music. The instrument manufacturers and music publishers saw the commercial potential in instrumental music and helped sponsor many of the contests for bands.  
6. After World War I, the military bands had inspired band music. Also many potential teachers returned from military bands.  
7. Many of the things that led to the decline of the professional band aided the rise of the school band. When sound movies came in 1928, this along with the depression, threw hundreds of pit musicians out of work and into the teacher's college.  

So the band flourished to the point where it is presently found in virtually every school in the country, both public and private. The rise in popularity of football helped to cement the band's standing in the community, so much so that in some communities the band is supported as much or more as the football team. Half-time shows continue to be more grandiose and spectacular until the saturation point, if it is not already here, is not far off. The marching and functional aspects of the band program are
obvious benefits of the band that the public views, but the band director often sees his role as being primarily a conductor of the concert band. The concert band, inheriting the Gilmore-Sousa tradition, for many years of its existence played programs very similar to the programming of these grand bandmasters. Marches, overtures, arrangements of movements of the symphonic repertorie, and novelty selections were the mainstay of the literature. As bands increased in size and in proficiency, band directors began looking to other sources for literature for the concert band, or “Symphonic Band”, a name originated in 1926. In looking for new music, band conductors discovered some original works for band, such as the two suites by Gustav Holst written in 1909-1911, and the Folk Song Suite and Toccata Marziale of Ralph Vaughan Williams (1924). These were “listenable” works which are well written for the band. Music publishers were not idle, and many new works appeared, basically geared for the “educational market.” In 1945, Richard Franco Goldman reviewing music for the band stated:

“(One might note that a great deal of pompous garbage is written, for band and otherwise, called ‘symphonic’ or ‘grand’ or bearing some other type of inflated description, to foster some baseless illusion in the mind of the composer or the audience or both. It is a great misfortune for our youngsters that so much ‘educational’ music falls into this category.) Most of the new band works of the composers named can stand on their own merits if they are taken for what they are: music written for a certain combination of instruments, to be played for a mass audience waiting to be entertained. Within that sphere they may justly be considered ‘major’ works.”

Also, in the same source, Goldman comments on the texture of the band of 1945:

“As constituted today, the band tends to be out of balance; it often produces a sound of which the outstanding characteristic is its thickness. Most of the instruments found in quantity in a band have thick or heavy sounds: the saxhorns, clarinets, and saxophones, for example. These instruments are also largely grouped in the middle registers, giving the band an overweight which is made even more apparent by its weakness in the extreme top register. The additions made to the instrumentation of the modern band have mostly been instruments of middle and low register, while the higher instruments have been disappearing. There is nothing in the band even remotely comparable to the top tones of the violins, nor does the flute stand out against the heavy blend of clarinets and cornets with the clarity it possesses in the orchestra. The high registers of the clarinets are shrill, unpleasant, and out of tune. The lowest register of the band suffers from a different handicap: not a lack of instruments, but too great a variety.”

The Wind Ensemble — A New Direction

This was the state of the band in the middle of the 20th century. A medium that was overly large, unbalanced, basically found only in educational institutions, and trying to find a new repertorie to help to justify and continue its existence and improve its status in the musical and academic community. In the fall of 1952 at the Eastman School of Music, Rochester, N. Y., Dr. Frederick Fennell organized a new type of wind performing group which he called the wind ensemble.

“The Eastman Wind Ensemble was organized in the Fall of 1952. It came to its establishment out of twenty years of work with the Eastman School Symphony Band which I began to organize when a freshman in 1933. The two decades had been filled with thorough study and careful performance of the significant music literature of the wind band, original and transcribed, plus a long and varied association, as conductor, with the music of chamber and symphony orchestra. Sibley Music Library and my faculty privilege to browse had allowed me to become aware of that sprawling and significant music literature for assorted combinations of wind instruments in ensemble that did not fall into the pattern of the traditional wind quintet or the concert band, and which was performed only rarely — mostly because there existed no ensemble which considered its performance to be a part of the repertory.”

Dr. Fennell explained the choice of naming the new group:

“I didn’t call the group a band simply because from my experience with all kinds of them I didn’t think that it was a band. To qualify for that distinguished classification a group should be uniformed in the tradition of the band, should be able to march and play in the open air in the tradition of that band, should perform the traditional music of the band and maintain those time-honored traditions and associations to which the public and its institutions have become so rightfully accustomed.”
The size of this new group was the main physical difference in its makeup. Also the size was one that fluctuated, something that the proponents of the concert band had long fought to correct. Band directors had been bemoaning the lack of a standard instrumentation for years, mainly due to the difference of band size and instrumentation found in the bands in the various European countries. One of the main projects of the College Band Directors National Association (C.B.D.N.A.) was the standardization of band instrumentation. Now along comes Frederick Fennell:

"It had long been my conviction that matters of instrumentation have always been the province of composers rather than committees; the music to be played would be the only factor to govern the choice of instruments that would be assembled. At the outset it listed 25 reeds, 18 brass, 8 percussion, harp, etc., an instrumental force permitting performance of the exemplary music written for the wind band; these forces, when reduced or expanded to those required for music which in no way lay within the band medium offered a group capable of performing a rich and neglected music literature."15

With these statements a new philosophy of band performance is divulged. The composer is now the primary force behind the medium, transcriptions are not the rule but the exception, and the instrumentation is of a more transparent nature, more like the wind section of a symphony orchestra, which changes its size depending on what piece is being performed. The instrumentation specified by Fennell, consisting of a maximum of 45 players is as follows:

<table>
<thead>
<tr>
<th>Reeds</th>
<th>Brass</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 flutes and piccolo</td>
<td>3 cornets in B♭ or</td>
</tr>
<tr>
<td>2 oboes and Eng. Hn.</td>
<td>5 trumpets in B♭</td>
</tr>
<tr>
<td>2 bassoons and contra bassoon</td>
<td>2 trumpets in B♭</td>
</tr>
<tr>
<td>1 E♭ clarinet</td>
<td>4 horns</td>
</tr>
<tr>
<td>8 B♭ clarinets, or A clarinets divided in any manner desired</td>
<td>3 trombones</td>
</tr>
<tr>
<td></td>
<td>2 euphoniums</td>
</tr>
<tr>
<td></td>
<td>1 E♭ tuba</td>
</tr>
<tr>
<td></td>
<td>1 BB♭ tuba or 2 if desired</td>
</tr>
</tbody>
</table>

Other Instruments
Percussion, harp, celeste, piano, organ, harpsichord, solo string instruments, and choral forces as desired.16

The group described above developed into a professional quality performing group and gained fame through a series of recordings on the Mercury label. Fennell's new wind ensemble became the talk of the band world and imitative groups began to appear in colleges and high schools. Today, twenty-one years later, the concept is firmly established, many schools having replaced the concert band with the wind ensemble, or both existing side by side and performing different repertory.

The wind ensemble concept is perhaps best described by Donald Hunsberger, the present conductor of the Eastman Wind Ensemble:

"The symphonic wind ensemble is in actuality a concept . . . a philosophy of musical life based upon the premise that wind music has the potential to earn its rightful position in the over-all musical hierarchy.

The eventual goal of the symphonic wind ensemble movement is the unqualified acceptance of concerted wind music on the same level as all other forms of instrumental or vocal composition. To achieve this goal, the concept functions through these premises:
A. Development of the performer as an individual as well as an ensemble performer.
B. Development of a wind repertory, original and transcribed/arranged, which is uncompromising in its artistic quality demands.
C. Development of an image of the wind band as a serious yet flexible musical organization whose existence is visible only through its devotion to concert music and its composers who are held to be the original creators in the performance processes.

The basic principles guiding the composer, conductor and performer in the symphonic wind ensemble concept may be stated as:
1. Specified instrumentation
2. Single performer approach
3. Orchestral concept of performance
4. Development of individual instrument tone colors."17

A new philosophy emerges with several major changes in theory and practice. A chamber music concept, with emphasis on the wishes of the composer and the training of the individual performer is stressed. This is a major change from the previous ideology of the symphonic band. In a dissertation written in 1955, Cdeggard discusses the status of the symphonic band:

"Frequently cited reasons for carrying a large personnel include the extension of training benefits to as many
capable students as possible without affecting musical objectives too adversely, and the need for training replacements due to course changes, illness, and other emergencies."  

This study offers a detailed description of much of the available band literature up to this period. Average figures are computed for full band scores vs. symphonic band scores and figures are given for duration average, price average and average cost per minute! In discussing the budget for new music of a school organization the author quotes Prescott and Cheester, Getting Results with School Bands, P. Schmitt, 1945, which was an influential text for many years.

"Prescott and Chidester suggest that twenty-five percent of the 'New Music' budget money should be spent for overtures; twenty percent for operatic selections, rhapsodies and medleys; ten percent for suites and symphonies; about nine percent for miscellaneous heavy concert music, etc. This seems to be a reasonable norm. However, an easy overture is often about forty percent in the march idiom, and a suite can be anything from an early dance to a modern symphonic suite."  

This is obviously thinking along different philosophical lines than that of the wind ensemble.

Perhaps the most published and eloquent spokesman for the concept of the wind ensemble is Dr. David Whitwell, currently conductor of the wind orchestra at California State University, Northridge, and recently elected president-elect of the C.B.D.N.A. Dr. Whitwell is a musicologist as well as a conductor and has done extensive research in music for wind instruments. In a recent publication he outlines the new philosophy, and claims that the problem of the contemporary band not being fully accepted as a cultural force is because of its failure to control two basic dimensions of all cultural mediums: defining its (1) aesthetic goals and (2) the nature of its history. Aesthetic music is defined as:

"music of inward significance which in its communication enables the listener to perceive an original intuitive idea, an artistic truth which lifts his spirit through catharsis."  

The important elements of this definition are:

1. Aesthetic music must be of substance, of inward significance.
2. It must be faithfully performed, so as to communicate the composer's original idea.
3. It must be received by a listener capable of proper contemplation. Entertainment music is that in which either the first or the third of the above elements is missing.

"Entertainment music is music which does not communicate an intuitive truth to a contemplative listener."  

On the subject of the band's history, Dr. Whitwell claims that it must face a choice. Either the band's cultural forebears were the military bands leading to the Gilmore, Sousa -- entertainment tradition or the band's cultural forebears were Mozart, Berlioz, Gounod, Strauss, etc. in their works for winds alone. He states that a musical composition is only a moment's manifestation of some idea, unless its idea speaks beyond its moment. If it does, then the historian is needed to establish its relationships -- the sociological view of music. Therefore the past never changes, but history always does, therefore we now have to look at the band (in the form of the wind ensemble) in a new light and see it as the proper culmination of the long past history of wind literature which Dr. Whitwell has documented.

Needless to say, while these views have been widely hailed in the band field, they are not universally accepted or put into practice as of this date. The immediate past-president of the C.B.D.N.A., Dr. Richard W. Bowles, of the University of Florida wrote in 1970:

"We wish to make the point that the association of bands with situational music, particularly of an ambulatory nature, is not only historically sound, but is almost irremediable from the thinking of the general public. We view this association not as something which should be resisted, but with considerable satisfaction and pride. The band ... must never become so sophisticated that it turns its back on the common people, or forgets the vital nature of its situational responsibilities."  

In another recent article Dr. Bowles expresses his dismay that recent band composers such as Paul Yoder and Clifton Williams are not dealt with or given due recognition by historians and musicologists. He reaches the conclusion that band directors have failed to bring their names to the attention of the general public and have completely failed to impress the historians.

Dr. Richard Franko Goldman, conductor of the Goldman Band of New York looks upon the band as a popular medium:

"The band is not 'high-brow' and should not try to be. The high-browism one occasionally finds in band circles not only leads to a dead end, but is culturally regressive. The
band as a medium of popular culture, does have a responsibility in that area: it can contribute significantly to improving the quality of the popular culture in which it thrives... one should not play second-rate original band music just because it is ‘original’. The band will be better off continuing to play Poet and Peasant, and the audience would rather hear that... the band concert, always remembering the band’s various publics, and the functions of the band in both education and entertainment, should be a lively miscellany.”

It is interesting to this author to note that, although Dr. Goldman was for many years a member of the faculty of the Juilliard School of Music in New York, a band was never a permanent performing organization at that institution, although of course many performances of wind chamber music take place there constantly. Another, the Curtis Institute in Philadelphia also is without a permanent band organization. Several other major conservatories, notably Eastman, of course, and also the New England Conservatory in Boston and the Manhattan School in New York now have permanent wind ensembles. So the lines are drawn, what is a band, what are its functions and reasons for existence? Perhaps a look at the composer will provide us with some answers.

The Composer and the Wind Ensemble

If the wind ensemble has rejected the historical base of the military-Sousa tradition as it apparently has, then one further question needs to be thoroughly investigated. Is there a sufficient body of wind literature existing throughout the history of music, combined with contemporary additions, to warrant serious acceptance of the wind ensemble as a performing medium equal in importance and scope to the symphony orchestra, string quartet, chorus, opera house, solo pianist, organist, or leder signer? With a cursory glance at music history the answer must be no. Hunt, writing in 1949 states:

“In due time, I made an exhaustive study in the field of original literature for concert band with the ultimate discovery that there is actually no significant music for wind-band from the ‘masters’ of the Baroque, Classic and Romantic epochs. Why had not Bach, Beethoven, Haydn, or Brahms written effectively for the band as well as for the orchestra? On the other hand, a surprising number of contemporary composers have favored the band with their writings, and often with excellent musical results.”

To this author it appears that the philosophical and historical roots of the wind ensemble are on shaky ground because the literature for winds only is, for the most part, the minor literature of any period or any composer, major or minor in stature. The case for pure wind literature is being overstated. In looking at the history of wind music it is certainly true that composers of the 19th, and especially the 20th centuries were and are drawn to wind instruments, but basically not in the sense of limiting themselves to wind instruments alone. For the most part, both in works for small and large ensemble alike, they were unwilling to forego the added and desirable color of the strings — therefore the majority of the works are for orchestra or mixed wind and string ensembles. Romantic composers were interested in color — that is why the string quartet literature declined through the 19th century and the piano or clarinet, or some other solo wind was added to the string quartet.

For the same reason mixed quartets of piano and winds or mixed octets such as the Schubert octet were favored. Dvorak could not resist adding a cello and contrabass to his lovely serenade. Dr. Whitwell is correct in stating that the serenades and divertimenti of Mozart and Haydn are not just Tafelmusik, but their true historic perspective and importance lies in their function of exposing composers to the possibilities of the winds which led to the full acceptance and the use of the winds in the orchestra, not the wind band.

What about the 20th century? It is true that the winds have enjoyed a great popularity, but not necessarily in works limited to winds alone. Stravinsky wrote several works for winds. The Symphonies of Wind Instruments (completely ignored by bands for many years), the Octet, Circus Polka, and Ebony Concerto. Also other works feature predominant winds such as the opera, Mavra, and the Concerto for Piano and Wind Orchestra. These works certainly do not represent the best or a cross-section of Stravinsky. Several major composers of the 20th century have written a few works for wind ensemble: Hindemith, Milhaud, Persichetti. The real bulk of the 20th century output has come from lesser known composers who appreciate the opportunity for performances and exposure. Hartley states:

“It might be asked at this point why I, as a composer of serious aspirations and some recognition of same, should have come to concentrate so much effort (no less than ten works in the past three years) on a performance medium still often considered a comparatively limited one? In the first place, I truly love writing wind music; in the second place, the response in my case from ensembles, directors and (presumably) audiences all over the United States has been most encouraging; performances abound, there are recordings, and commissions like that from South Florida.
have been gratifyingly frequent. In fact it is mainly (if not entirely) owing to my wind ensemble music, and my solo and chamber music for wind and brass instruments, that I have attained to whatever degree of celebrity I have.  

The above is ample evidence of reasons for composing music for winds alone, few of which are musical ones.

The Wind Ensemble and the Music Educator

As has been previously stated the foundations and much of the history of music education in the United States has been performance oriented. More recent trends, such as the symposia at Yale in 1963 and Tanglewood in 1967 and the Contemporary Music Project beginning in 1962, have tried to influence a change in emphasis from music education that is performance based to a program that is much more all-inclusive — combining all of the areas of music — history, performance, analysis, composition and giving the student a background in all of these. How does the wind ensemble fit into this picture? It would have to be viewed as a step in the right direction. Anything which reverses the wishes of the composer and the presentation of “aesthetic” music should not be too severely criticized, especially in the light of past music education. However, as a complete answer to the music education of the future it fails miserably.

Music education should not strive to make any type of music or any type of performing group more or less than it is. What it is depends a great deal on your philosophical outlook toward music — whether you are a Romantic, who believes that masterworks are created by geniuses who have “seen the light” and speak eternal truths to all ages, or whether you are a Sociologist, who believes that the value of music changes with how it is accepted or rejected by a given era. The advocates of the entertainment-concert band are Romantics who are asking us to continue to worship the glory of a bygone era. The advocates of the aesthetic-wind ensemble are sociologists who are asking us to give new importance to basically secondary literature of the past.

Music educators should not overdo the emphasis on any particular literature just because it is written for any particular group of instruments. The works of any composer should be judged on merits other than what performing medium is written for — that is just one aspect of a musical composition. The band and the wind ensemble have served a definite purpose in music education and this purpose should not be belittled or overstated. What music educators need to do is to re-evaluate the purposes and goals of performing and the type of performing groups used in relation to the total goals of the total music education program and strengthen the types of performing that aid these goals and delete those which do not. Music education that stresses only performance without understanding is gravely deficient, no matter what literature is being performed.

Music historians and musicologists deal daily with value judgments regarding music. Much of this has been passed on to us in music history courses and in our observations of the total musical world around us. Can any thinking musician or music educator say that a student should be better acquainted with the wind literature of Mozart instead of or before knowing the late symphonies, the operas, or even the string quartets? Yet how many college wind majors know the string quartets of Mozart or anyone else equally as well as they know the literature they have performed in four years of band? It depends on where your values lie. Should Berlioz's Funeral and Triumphant Symphony (with ad-lib string parts) be given greater importance or exposure than the Symphonie Fantastique which elevated wind instruments to prominence almost in a single stroke? Transcriptions are not the answer either. The works for winds of any composer should be presented to students in terms of the total output of that composer and the period of music history in which they were written and evaluated in that light. No more — no less. Incidentally, eliminating all entertainment music from music education as Dr. Whitwell suggests would cut out a large bulk of the repertoire and it would also set us to the task of deciding which works have “substance or inward significance.” Has the science of aesthetics become that exacting as yet?

At the earlier stages of music education, in elementary and junior high school, the problem has been in finding literature for performance by students. The Juilliard Repertory Project has been one attempt to fill this need with “good” literature. Obviously, beginning and intermediate students cannot perform the masterworks, and therefore suitable easier works, often of “lesser” quality or arrangements of the “classics” have to be used. The point is that more advanced students in high schools and colleges can perform the “better” works and, for the most part have not. Music educators must be held responsible for this. Some of the reasons for this are rooted in the use of the band as primarily a functional and entertainment unit, which has, in turn, been promoted and presented to students as a performing organization of much greater importance to music than its literature of the past or present warrants, both in the fields of entertainment and/or art music. Band directors and band organizations constantly bemoan their lack of respect by the musical community and the general public. The reasons are not because of the quality of their performance, which has never been better, but because of the literature for this medium, whether by Mozart, Beethoven, Reingale, or Godfrey.

A far-fetched hypothetical case will be used to illustrate the point. Suppose that some early music educator had liked the accordion, was successful in teaching it to a group of students, organized them into
an accordion ensemble, and sold the board of education on the idea that the best path for music education in the schools to take was for everyone who was interested to learn the accordion. If he had been successful, today we would find thousands of music teachers trying to justify the accordion and searching the archives for aesthetic literature for the accordion. (Most likely this does occur with many private accordion teachers.) There is nothing wrong with literature for the accordion if it is recognized as such and not made into something more. The point is that there is nothing wrong with knowing about and performing "lesser" works, but if this is at the expense of not knowing about and performing masterworks, then a grave injustice has been done.

Implications for the Future

In a recent article addressed to band directors, Sperry states:

"We must avoid thinking of the band as something exclusive and self-sufficient. We must relate the band to the total music scene in every way. If, as a musicologist said recently in a surprising, matter-of-fact fashion, contemporary compositions of significance are in three areas: electronic, aleatoric, and those for winds and percussion, then it becomes essential that we accept our role as Leaders of the music world." 16

Are we (band directors) leaders of the music world? It is the view of this author that we are not, and very likely never will be. With a few exceptions, the pattern in music has been: (1) discovery of the medium, (2) perfection of the performer, and (3) acceptance and use by the composer. This author believes the wind ensemble came about 100 years too late. Composers have already discovered winds and they have written for winds — although not always totally for winds. If there is any "hot" new medium it has to be electronics, which is still in its infancy. We may see a period of winds plus electronics, but a period of interest in winds alone is remote at best. If music education is to improve it will have to reflect and impart a much more total picture of the literature and practice of music than any band, wind ensemble, or any other single performing group can provide by itself. The wind ensemble is a step in the right direction, but it is not the ultimate answer.

Footnotes


2. Ibid., p. 15.


6. Ibid., p. 32.


8. Ibid., p. 10.


12. Ibid., pp. 103-4.


15. Ibid., p. 17.


19. Ibid., p. 77.


21. Ibid., p. 75.

22. Ibid., pp. 78-9.


Bibliography

BOOKS


PERIODICALS


UNPUBLISHED MATERIAL


INTER-SUBJECT INVOLVEMENT

Michael F. Hunt
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One of the problems in teaching is overcoming compartmentalization. Both the Contemporary Music Project (CMP) and the Manhattanville Music Curriculum Program (MMCP) emphasize the need to broaden the scope of music curriculums. "Many of our present modes of instruction and curriculum practices lead to a fragmented view of the total art." The fragmented approach narrows the student's perspective of the total subject through restricted experiences or overemphasis on systematic procedures, which may in turn lead to intellectual closure. "Closure develops when the student's education narrows rather than broadens his intellectual curiosity — when his insights are so confined he is unwilling or unable to make judgments of new experiences."

A statement by Bruner reinforces the need for a broad approach: "Learning that has fallen short of a grasp of general principles has little reward in terms of intellectual excitement." Subjects should be taught in such a way that the initial grasp of general principles may be applied to a variety of specific situations. This "transfer" of general principles to specific situations by students represents true intellectual development. As Bruner states: "The leap from mere learning to using what one has learned in thinking is an essential step in the use of the mind."

Bruner, CMP, and MMCP all help to point out the trend in contemporary educational processes towards elements of Gestalt-field psychology. The central idea of Gestalt-field psychology is "that a thing can best be understood by a study of it as a totality rather than a study of its constituent parts." "More recent Gestalt-field theorists say that learning is a relativistic process . . . relativistic in the sense that insightful learning is concerned with a basic sense of, or feeling for, relationships." MMCP furthers this view by stating that their objectives "cannot be conceived in isolation from one another."

Integration of all the separate subject headings in a particular field into a complete, comprehensible whole, or Gestalt, is a monumental problem, let alone integrating different fields (such as music, art, history, math, natural science, physics, etc.) into the students' thought processes. Separation and specialization of classes is a necessity; however, some attempt should be made to show the student how differing fields may inter-relate with one another. Many general principles of specific fields are applicable to several differing fields of study.

Students who forget all they know about a particular subject as soon as they leave that special classroom are conditioned to do so by the system of compartmentalization and fragmentation in education.

Teachers should, whenever the opportunity arises, give assignments and projects that will force the student to draw on a variety of subject backgrounds. Overcoming narrowness of approach should be one of the objectives of education.

The trend in education should not only be towards a Gestalt of general principles within a subject, but also towards general principles and relationships between differing subjects. What is needed is to extend Bruner's idea (of transfer of knowledge of general principles to specific situations) to include the Gestalt of totality of all education. As stated by CMP: "If we are to broaden the horizons and understandings of all musics — past, present, and future — for our students and future professionals, we, the teachers, will first have to take on the challenge of broadening our approach."

The following is an example of a project that employs a broad, inter-subject approach to such a traditional topic as musical form and analysis. This project involves the student in a variety of subjects including musical form and analysis, music history, general music theory, biography, math, geometry, natural science, botany, art, art history, and ancient history. The project lends itself well to class projects as well as individual reports. It consists of analyzing the first movement of Bela Bartok's "Music for Strings, Percussion, and Celesta" using the Fibonacci Series as a basis.

The Fibonacci Series was discovered by "Leonardo of Pisa, often called Fibonacci, that is, son of Bonaccio. During his life he travelled extensively about the Mediterranean visiting Egypt, Syria, Greece, Sicily, and southern France, and knowledge thus gleaned regarding arithmetic systems used by merchants of different countries was the basis of a notable work, entitled Liber Abaci, which he wrote in 1202." The full title of his treatise was "Liber abbaci a Leonardo filio Bonacci compositus, anno 1202 et correctus ab codem anno 1228. It was first printed in 1597 by Baldassare Boncompagni, Rome." "This is a storehouse from which for centuries authors got material for works on arithmetic and algebra. The Hindu-Arabic system of numerals was here strongly advocated and illustrated, and the work did much to introduce it into Europe." One of the mathematical problems of the twelfth century which he solved by the series asks the question: "How many pairs of rabbits can be produced from a single pair in a year? It is supposed (1) that every month each pair begets a new pair which, from the second month on, becomes productive; and (2) that deaths do not occur. From these data it is found that the number of pairs in successive months would be as follows:

1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144, 233, 377. These numbers follow the law that every term after the second is equal to the sum of the two preceding."

In this series "(as in the O series) each term is equal to the sum of
the two preceding ones, and the ratio between two successive terms tends very rapidly to $\Phi = 1.618$.\textsuperscript{114}

\[ \frac{8}{5} = 1.6, \quad \frac{89}{55} = 1.618 \ldots \]

The Fibonacci Series is an approximation of a $\Phi$ series. A more accurate substitute series would be: 118, 191, 309, 500, 809, 1309, 2118, 3427, 5545, 8972, etc. “One term of this series divided into the other equals 1.6180.”\textsuperscript{15}

The project may be further extended by researching the relationship between the Fibonacci Series and the Golden Section of $\Phi$ series. This would involve the student in the ancient history of the Golden Section, its math (use of irrational numbers), and the use of the Golden Section in art and nature. However, without further elucidation it should be understood that the Fibonacci Series is a numerical approximation of the relationships involved in the Golden Section principle. (See Bibliography for sources.)

“The Fibonacci Series reflects, in fact, the law of natural growth.”\textsuperscript{16} The series can be observed in the growth patterns of many plants. “The Golden Section of a circle, having 360°, subtends an angle of 222.5° on one hand, and 137.5° on the other. It can be observed in a large number of plants; e.g., palms, poplars, catkins, etc., that each bud, twig, or leaf subtends an angle of 137.5° with the next one. Also, each new branch divides the former fields of section according to the rules of the Golden Section: so twig 3 divides the right-hand field between 1 and 2; twig 4 the left-hand field between 1 and 2; twig 5 does the same with the field between 2 and 3, ad inf.”\textsuperscript{17} (See fig. 1, below) The Fibonacci Series is evident in this illustration in that the field between 2 and 3 is divided by 5, the field between 3 and 5 is divided by 8, and the field between 5 and 8 is divided by 13, etc.\textsuperscript{18}

Mr. Hambidge defines phyllotaxis (Gk. phyllon, leaf, and taxis, order) as the distribution or arrangement of leaves on the stem, and the laws which collectively govern such distribution.\textsuperscript{19} “The operation of the law of leaf distribution and its connection with the summation series of numbers is explained by Professor Church, who uses as illustration the disk of the sunflower.”\textsuperscript{20} “The most perfect examples of phyllotaxis easily obtainable are afforded by the common sunflower. A fairly large head, 5-6 inches in diameter in the fruiting condition, will show exactly 55 long curves crossing 89 shorter ones. A head slightly smaller, 3-5 inches across the disk, exactly 34 long and 55 short; very large heads give 89 long and 144 short; the smallest tertiary heads reduce to 21-34, and ultimately 13-21 may be found.”\textsuperscript{21}

Pine cones also show evidence of growth structure which exhibits the Fibonacci Series, especially fir cones. “Proceeding from the center of its disc, logarithmic spirals are seen to move clockwise and anti-clockwise in a closed system where the numbers of the spirals always represent values of the Fibonacci Series. (If we turn the cone upside down, we can also see the system of two spirals along the junction lines of the scales.) Each of the spiral systems contain all the scales of the cone. There are cones which the numbers of the spirals present still higher series values: 3, 5, 8, 13, 21.”\textsuperscript{22}

“The mathematical curve most intimately related to living growth and to the pulsations of the rigorous $\Phi$ series and of its approximation, the Fibonacci Series, is the equi-angular or logarithmic spiral in which the angles between the radii grow in arithmetical progression but the radii themselves grow in an exponential progression. This curve has the property of gnomic growth, that is: two of its arcs are always "similar" to each other, varying in dimension but not in shape (in the same spiral), and the same applies to the surfaces determined by the vector radii and even the volumes controlled by logarithmic spirals as in marine shells. Each logarithmic spiral is associated to a characteristic rectangle and proportion, and the spirals whose quadrant proportions are $\Phi$ and the square root of $\Phi$ are the most frequently met with in organic growth and especially shells.”\textsuperscript{23} (See fig. 2)
The shell that epitomizes this curve is the survivor of pre-historic times, the cephalopod nautilus. The spiral growth curve of the nautilus is illustrated in fig. 3 below. "The diagonals drawn in any direction through the center provide a pattern in which the center always remains in the positive or negative Golden Section of the fields marked A-B, B-C, C-D, D-E, E-F, F-G. ..." (The positive section refers to the larger of the two, and the negative section is the smaller of the two. On a given line divided by a Golden Section measurement, the choice of placing the larger or smaller section first is an arbitrary one.)

![Figure 3](image)

fig. 3

A logarithmic spiral may be observed to form at the tip of an elephant's trunk when the muscles are relaxed and the trunk curls into its natural shape, and the tusks of the extinct great mammoth also inscribe the infinite spiral.

"You can see the logarithmic spiral at the tip of an unfolding fern leaf — the so-called fiddlehead. If you have a very fast camera and the right kind of light, you can catch the motion of a breaking wave; it too describes a logarithmic spiral."

The principles of the proportion of the Golden Section and the Fibonacci Series have been applied to architecture, sculpture, and painting since early recorded history, and there are numerous books and articles which deal with these principles in works of art. However, few authors have written about the application of the "Divine Proportions" to music. One such author, Erno Lendvai, speaks of musical structures that are based on the Fibonacci Series in his book titled Bela Bartok, An Analysis of His Music. In the following paragraphs I will explain Lendvai's premise, and offer some further proposals that will refine his thesis on how the Fibonacci Series may be applied to the first movement of Bela Bartok's "Music for Strings, Percussion, and Celesta."

According to Lendvai, the first movement of Bartok's "Music for Strings, Percussion, and Celesta" may be analyzed in such a way so that significant musical events occur in groups of measures that correspond to numbers of the Fibonacci Series. (See Chart I, page 84.)

In order to make his thesis work, Mr. Lendvai requires that an extra measure of silence be added to the end of the movement "in accordance with the Bulow analyses of Beethoven." The author of this paper has not been able to find any references which would verify Bulow's practice of extending Beethoven by a measure of silence; however, when an extra measure of silence is added to the end of the first movement of Bartok's work, the result is eighty-nine measures, the exact number of measures needed to complete the
summation series: 1, 2, 3, 5, 8, 13, 21, 34, 55, 89. (All measures are regarded as equal and time changes are disregarded.)

If accepted that the movement is to be 89 measures long, then it should follow that a Golden Section of 89, \(\frac{89}{2} = 44.5\), would result with a division of the movement into two sections, one of 55 measures and the other of 34 measures. The division would be the bar line between measures 55 and 56, and indeed, exactly at this point, the climax of the movement occurs. This is also the loudest point in the movement, and, as shown on the chart, the movement begins pp, gradually crescendos until reaching the climax at fff at the downbeat of measure 56, and then quickly diminuendos down to ppp at the end of the movement.

Each of the two sections may be further divided according to the numbers of the Fibonacci Series. The first section of 55 measures would be divided into sections of 34 measures and 21 measures. Measure 34 is the first entrance of any percussion instrument, (the timpani roll), and also the measure in which the strings begin to remove their mutes.

The dividing line would be drawn, using the Fibonacci Series, between measures 34 and 35. Measure 35 is the first instance of the entire string section playing without mutes.

The first section of 34 measures may be further divided into two sections, one with 21 measures, followed by the remainder of 13 measures. The first 21 measures contain five successive entries of the fugue subject, and the fifth entry ends with a long held G in the first and second basses in measure 21. Measure 22 is the first measure in the movement not containing a statement of the fugue subject, so that the dividing line may be drawn between measures 21 and 22.

After the climax between measures 55 and 56, the remaining 34 measures (with the addition of the silent measure) may be divided again into two sections of 21 measures and 13 measures; however, this time the order of which section precedes, the larger or the smaller, is reversed. In each division beforehand, the larger, or positive, section was always placed first, followed by the smaller, or negative, section. The last 34 measures are divided into 13 and 21. The section of 13 measures after the climax contains diminishing momentum and dynamics, and partial entries of the inverted fugue subject. The division comes between measures 68 and 69, where in measure 69 complete inverted fugue subjects enter in violins III & IV and violas I & II. Also at this point the strings put on their mutes again as in the beginning.

The last section of 21 measures may be further divided into two sections. The division comes between measures 81 and 82. The first section of 13 measures, starting at measure 69, contains the inverted fugue subject entries, and the entrance of the celesta, while violins I & IV play rhythmically distorted fugue subjects, both in original and inverted versions, through the held tremolos and harmonics of the remaining strings. The last section of 8 measures (including the measure of silence) is a coda. The beginning of the fugue subject is stated, followed by an inverted answer. This idea of subject followed by a stretto inverted answer is repeated until in measure 86, both fugue subject and its inversion are stated simultaneously, note against note, bringing the movement to a close.

By analyzing the first movement of Bartok's "Music for Strings, Percussion, and Celesta" according to major timbral and thematic changes, the number of measures in each section are always numbers of the Fibonacci Series, and the summation of two smaller sections always equals the next integer of the Fibonacci Series in a pyramid-like structure which is constructed of inner triangles of similar shape. (See Chart II, page 85.)

The project could be extended again in three different directions. First, if the students have a thorough grasp of the principles involved in analyzing the first movement according to the Fibonacci Series, then let them proceed to the third movement of Bartok's "Music for Strings, Percussion, and Celesta", and apply the same method to that movement. The second extension could involve intensive reading of biographies of Bartok by students to see if they could find any references as to whether Bartok consciously applied the principles of the Fibonacci Series or the Golden Section to his music. The third extension could be to look for rhythmic illustrations of the Fibonacci Series in music (not necessarily the music of Bartok).

The author hopes that from the above example the reader will be able to see the relevance of inter-subject involvement, and the possibilities it offers for the enrichment of a total education. As quoted before from the CMP, if we, as teachers, are to broaden the horizons and understandings of our students, we must first take on the challenge of broadening our approach.\textsuperscript{32}
Footnotes


3. Ibid., p. 5


7. Ibid., p. 31.


17. Ibid., p. 30.

18. Ibid., p. 31.


26. Ibid., pp. 748-750.

27. Ibid., pp. 898-899.


29. For an example of how the Golden Section and the Fibonacci Series were used in Medieval and early Renaissance music, especially the Mass "Missa super Messe unart" by Obrecht (1452-1505), see the text titled "Secret Structure" by M. van Crevel in Jacobus Obrecht: Opera Omnia, Vol. 1, Part 7. Amsterdam: SRO, 1964, pp. LVL-CXLI.


31. Ibid.


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--------. The Elements of Dynamic Symmetry. New York: Brentano's, 1926.


THE TWENTIETH CENTURY: A SECONDARY TEACHER’S GUIDE FOR THE INTRODUCTION OF TWENTIETH CENTURY MUSIC WITH EMPHASIS UPON AMERICAN COMPOSERS

Douglas Leonard Turpin
Parkway School District

This paper is based upon the author’s dissertation entitled The Twentieth Century: A Secondary Teacher’s Guide for the Introduction of Twentieth Century Music With Emphasis Upon American Composers, written at Washington University, as partial fulfillment for the degree of Doctor of Music Education. This paper was presented to the Research Division of the Southwest Music Educators National Conference, March 1973.

Intent of the Study

The main objective of this work is to provide the secondary music teacher with certain introductory information that might be pertinent to the study of twentieth century art music. While a general overview is provided which includes the works and compositional techniques of European as well as American composers, the main emphasis is on the American (United States) composer. This came about because most of the important works which deal with twentieth century music place the main emphasis on the European composer. Certainly, all musicians are aware of the important role that the European composer has played in the development of music throughout its history, but often the teacher, as well as the student, is unaware of the significant role the American composer is playing during this, the twentieth century. Even though this work is most specifically designed with the secondary general music teacher in mind, it could also be used by teachers of special classes. For example: (1) the American composer; (2) theory classes; (3) the twentieth century; (4) intermediate or advanced analysis; (5) a twentieth century composition class; and (6) the study of synthesized music.

Need for the Study

Much twentieth century art music, while existing for some seventy-two years, can be traced harmonically to Wagner’s Tristan und Isolde, or, more especially, to the orchestral transition between scenes one and two in Act One of Parsifal. Concerning rhythm, Copland¹ believes that:

In Mussorgsky’s music we find the germ of many of those later rhythmic developments that have so pro-
foundly influenced all new music. The rhythmical freedom
to be found in Stravinsky's early works, and therefore in
the works of a whole generation of modern composers is
directly attributable to the innovations of Musorgsky and
his fellow Russians.

With the music of Debussy we find not only a disenchantedness from
traditional forms but an even further disengagement from functional
harmony. The Romantic style, as a fertile and creative means of
composing, probably climaxed with works such as Strauss's Salome
and Elektra, with Mahler's Eighth Symphony, and with Schoenberg's
Gurrelieder. It was during the premier years of these works that
twentieth century composers began to look for new means of
expression. Schoenberg, after his Romantic inclinations, moved quite
naturally into atonality while Stravinsky shocked the listener's
eighteenth and nineteenth century concept of rhythm with the
barbaric pulsations found in his Le Sacre du Printemps. From this
point on composers have continually searched for different and
unique ways to express themselves. This continual experimentation
has made it difficult for writers to define clearly the route by which
twentieth century music is evolving. But, nevertheless, twentieth
century music does exist and the young composer is being influenced
by it and, of course, contemporary composers influence one another.

Twentieth century music seems to be the summing up of the
entire history of music; a time for composers to utilize all those
compositional devices of the past while being unrestrained by the
bondage of functional harmony, traditional form, and even those
physical limitations inherent in human beings with regard to
performance. Today's composer can turn to the computer and
synthesizer and create any sound that he is able to imagine. The
modern composer is equipped with more compositional techniques,
more pertinent historical information, and more ways of having his
music performed than in any other time in the history of music. Yet,
his music, for the most part, is not performed, nor consumed by the
public, or even studied in depth at the university, much less in the
secondary schools.

This problem has been defined by many contemporary educators.
Youngberg says:

.... Today's adult audiences (and not only the
unenlightened ones) generally avoid concerts of
contemporary music. They are disturbed by angular melodic
lines, dissonant harmonies, and complicated rhythms.
They listen in wrath or with boredom and leave at the
interruption, if not before.

In other words, "... the public has not kept pace with this
musical evolution."3

When Lukas Foss4 was asked by the Newsletter of the American
Symphony Orchestra League to suggest ways to help audiences enjoy
contemporary music he replied:

That is a very difficult question to answer except with
the cliche word education... First, your mind has to be
opened to the beauty of that particular thing; and how do
you open somebody's mind? There is only education for
that....

Foss, while admitting that education is one way to alleviate that
problem, does use the word education reluctantly. This composer,
like many contemporary educators, is aware that education in music
appreciation and understanding is almost uninvolved with twentieth
century music. Archibue5 expresses this view when she says,
"Traditionally, music taught in the public schools has been pre-
dominantly music of the eighteenth and nineteenth centuries." Sherm
t and Hill6 write that:

Except for the limited amount of contemporary music
performed at collegiate institutions, and the even more
limited number of graduate courses partially or entirely
devoted to the music of our time, music education has not
arrived at the twentieth century.

Adler7 shares this opinion and says:

... The truth is, however, that most of our institutions,
especially those concerned with higher learning, have
perpetuated an outmoded, unscrutinized system of
teaching and curriculum for many years now.

Sherman and Hill8 further acknowledge the fact that a need exists
to present, as an integrated part of the curriculum, the music of the
twentieth century:

Technical accomplishments in music during the present
century has shown a rate of increase comparable to many
of the sciences. As the years pass, the gap between the art
and the school curriculum becomes increasingly large.
Unless concerted efforts are made to create a music
curriculum more independently couched in twentieth
century aesthetics and related pedagogy, we will become a
nation hopelessly untutored in the music of our own time.

Curriculum reform concerning twentieth century music is needed
at all levels of education — kindergarten through graduate school.
Granzier9 reminds us:

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As teachers we have the development of musical tastes of future generations on our hands. The genius will succeed in spite of us, but the masses depend on us for the exploration of new music and for guidance and insight into an art which, in this century, is diverse and somewhat confusing. We need to remind ourselves that the children who are in the schools today will be the audience of the twenty-first century and they should be schooled as such.

... the unfamiliar tonalities and musical textures of some of the twentieth century compositions is a 'foreign language' to their Mozartian and Schubertian trained ears.

The Music Lab

One of the first concerns of the writer was the construction of a model music classroom with equipment designed to meet the needs of the contemporary music educator with regard to the introduction of musical dimensions via twentieth century music. The suggested equipment was as follows: (1) ElectroComp Studio Synthesizer; (2) Manual Controller; (3) tape recorders; (4) stereo; (5) general supplies; (6) saw; (7) percussion instruments; (8) piano (for preparing); (9) wire music; and (10) monochord.

Introduction to Musical Dimensions

A series of experiments were then designed for the following reasons: (1) to provide the class with an opportunity to understand specific musical dimensions and the various characteristics associated with these dimensions; (2) to provide an aural demonstration of simultaneities; (3) to demonstrate how simultaneities can affect timbre; (4) to demonstrate through participation some of the rhythmic characteristics inherent to this century; (5) to become familiar with some of the techniques and terminology associated with Electronic Music and Musique Concrète; and (6) to learn to use the equipment found in the Model Classroom.

The basic concept of music is that of the organization of sounds and silence. The study of the musical tone is basic to the understanding of organized musical sounds. The characteristics of the musical tone which are studied in this thesis are as follows: "... (1) frequency and pitch; (2) intensity and loudness; (3) growth, steady-state, decay, and duration; (4) portamento; (5) timbre; and (6) vibrato." Simultaneities, simultaneities and texture, and an introduction to rhythm are also included.

In subsequent chapters the writer used selected pre-twentieth and twentieth century European or American compositions to trace the evolution, often from antiquity, of specific musical dimensions such as (1) rhythm; (2) pitch organization (horizontal and vertical); (3) texture, density, and harmonic rhythm; and (4) form. These dimensions were further subdivided so that the completed sequence of study was as follows (see below):

Figure I

I. RHYTHM
   A. The Takt
   B. The Barline
   C. Polyrhythm or Cross Rhythm
   D. Shifting Meters
   E. Polymeter
   F. Displaced Accents

II. PITCH ORGANIZATION (HORIZONTAL)
   A. Codification of Pitches
   B. Major and Minor Scales
   C. Other Scales
   D. Symmetry and Asymmetry
   E. Diatonic and Chromatic Lines
   F. Intervals
   G. Pointilism
   H. The Tone Row
   I. Declamatory Style (Sprechstimme)

III. SIMULTANEITIES (VERTICAL)
   A. Tertian Harmony
   B. Altered Chords
   C. Simultaneities in the Twentieth Century (atonality)
   D. Serial Music
   E. Tone Clusters
   F. Pandiatomicism
   G. Bitonality
   H. Musique Concrète
   I. Hindemith's Harmonic System

IV. TEXTURE
   A. Heterophony
   B. Monophony
   C. Polyphony
   D. Homophony
   E. Amphony

V. DENSITY AND HARMONIC RHYTHM

In the concluding chapter formalistic aspects of selected American
(United States) compositions were investigated. Apel defines musical form as "The general principles and schemes that govern the over-all structure of a composition." Paramount among these principles which were considered are: (1) repetitions; (2) variations; (3) contrasts; and (4) development; each of these aspects were discussed with respect to an elementary listening approach. Those compositions selected possessed easily understandable musical elements with regard to content repetition, variation of a theme or motive, and contrasts or development. The reason for these criteria is quite obvious in that most secondary music students would probably be unable to understand the more complex theoretical approaches that are often associated with musical form. If the students understand that music does have form, and are able to listen for certain aspects of this form, then this should suffice during an introductory unit. Composers from the United States were selected because the writer believes that American students should be aware that the American composer exists and is contributing greatly to the music of this century.

Those American composers whose compositions were chosen for analytical study are shown below:

<table>
<thead>
<tr>
<th>Composer</th>
<th>Composition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charles Ives</td>
<td>Variations on America</td>
</tr>
<tr>
<td></td>
<td>The Unanswered Question</td>
</tr>
<tr>
<td>Henry Cowell</td>
<td>Amerind Suite</td>
</tr>
<tr>
<td></td>
<td>Short Symphony (No. 4)</td>
</tr>
<tr>
<td>Aaron Copland</td>
<td>Orchestral Variations</td>
</tr>
<tr>
<td></td>
<td>Passacaglia (for piano)</td>
</tr>
<tr>
<td>Roy Harris</td>
<td>Toccata for Piano</td>
</tr>
<tr>
<td></td>
<td>Third Symphony</td>
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<tr>
<td>Roger Sessions</td>
<td>Chorale Prelude (No. 3)</td>
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<td></td>
<td>Second Piano Sonata</td>
</tr>
<tr>
<td>William Schuman</td>
<td>George Washington Bridge</td>
</tr>
<tr>
<td></td>
<td>New England Triptch</td>
</tr>
<tr>
<td>John Cage</td>
<td>Amores</td>
</tr>
<tr>
<td>Alan Hovhaness</td>
<td>Sharagan and Fugue</td>
</tr>
<tr>
<td>Wallingford Riegger</td>
<td>Concerto for Piano and</td>
</tr>
<tr>
<td></td>
<td>Woodwind Quintet</td>
</tr>
<tr>
<td>Gunther Schuller</td>
<td>Studies on Themes of</td>
</tr>
<tr>
<td></td>
<td>Paul Klee</td>
</tr>
<tr>
<td>Jean Eichelberger Ivey</td>
<td>Pinball</td>
</tr>
<tr>
<td>Lejaren Hiller and Robert Baker</td>
<td>Computer Cantata</td>
</tr>
</tbody>
</table>

The writer attempted to present a cross section of works by various American composers in order to illustrate the following: (1) that the American composer, as well as the European composer, is making a valuable contribution to the music of the twentieth century; and (2) that through the analysis and descriptions of the selected compositions the students should be aware that twentieth century compositional techniques are highly eclectic and individualistic in character. Throughout the dissertation the writer attempted to illustrate this individualistic freedom with which the twentieth century composer is able to work. While this freedom of musical expression is highly individualistic, one cannot help but observe the ties this century has with the various other centuries. This is obvious in the terms which have emerged during this era (e.g., the Neo-Baroque, Neo-Classic, etc.).

Certainly, one can now be more optimistic that twentieth century art music will eventually become an intricate part of the school curriculum. This is due, in part, to the favorable publicity which resulted from a number of worthy projects. For example: (1) the Contemporary Music Project (C.M.P.); (2) the Manhattanville Project; (3) the Commission on Teacher Education of the Music Educators National Conference (Task Group III); and (4) the November, 1968 issue of the Music Educators Journal. This entire issue was dedicated to electronic music and musique concrète and included reports of successful experimentation and implementation of this music within the secondary school classroom.

Admittable, this century and its musical direction are often difficult to predict but, nevertheless, today's composition does exist. It is a part of our heritage; consequently, it should be studied within our educational systems and not shelved as though it did not exist.

Footnotes

3. Ibid.
MUSIC AND MEDIA

M. Orville Johnson
Independence Public Schools

In November of 1973, the Independence Public Schools in cooperation with the Young Matrons and the Community Association for the Arts, both of Independence, planned and presented an orchestra concert for students in grades four, five, and six, and students in the music classes of grades seven, eight, and nine. The program was financed with the aid of the Missouri Council on the Arts plus additional money from Federal Funds and a small fee from each student.

The design of the concert was to incorporate several media into the presentation of the music, hoping thereby, to present to the young students a more interesting and exciting listening activity.

Mrs. Helen Hollander, a member of the Kansas City Philharmonic Orchestra, has long been associated with "new" ideas for presenting music to young people. Her activity and participation in Young Audience programs has given her insights into how young people respond to music and this has aided her in developing new approaches to the art of listening. Mrs. Hollander wrote the original script for this concert presentation and, with the aid of Miss Aleta Runkle, Vocal Music Consultant for the schools of Independence, and M. O. Johnson, Supervisor of Music Education for the schools of Independence, the script was adjusted to fit the music more precisely.

It was determined that three orchestral selections were to be used with the visual media (slides); two selections would be used with the auditorium organ as a medium; and third, that the students themselves would be included in the singing of the last selection on the program.


In the first selection, the organ played the fugue and emphasized the themes to the development section. The orchestra then played this same music and completed the fugue (Stokowski arrangement).

The auditorium, being almost round, was likened to the world and using the railing as the equator, the several countries of the world to be visited were placed on this imaginary map.

Using three screens and three projectors, and projecting different slides in each of the three projectors (in almost every instance), the
music of "Wedding Day at Troldhaugen" was presented. Slides were changed simultaneously in each of the three projectors every fifteen seconds. Changing three slides at one time every fifteen seconds demanded four slides in each projector every minute. The total number of slides would be determined by multiplying this figure by the number of minutes and seconds demanded for playing the music. The number of slides used in each of the three musical selections ranged from fifty-four to ninety-six.

Slides shown during the Grieg selection consisted of scenery, people, boats, buildings, and dancers (Midsommer Nights Festival).

The music of the "Painted Desert" was selected because of its unique musical structure and because of the beauty of the great southwest of the United States. Slides for this presentation included scenes of the desert, flowers, people, cacti, sunsets, rocks, hills, sand and a few animals. Pictures were changed every ten seconds because the music moves slowly and the mood of the music seems to demand a more rapid changing of the slides.

Paris, with its taxis, honking horns, and bustling crowds seem to go with "An American in Paris" and the slides for this musical number included people, street scenes, well known structures in Paris, taxis, and some art pictures.

Again, the narrator, players of the orchestra, and students were joined together with the sounds so often associated with Paris. Slides were changed on all three screens every fifteen seconds. The music for this selection is much too long for a school concert, but with the help of Mr. and Mrs. Hollander, and the conductor, James Paul, the "American in Paris" selection was reduced in length to about eight minutes. With slides this length, musical selection did not seem to be too long for a student concert.

The young people's concert in Independence have been a concern of Miss Runkle, Mrs. Hollander and the author each time the orchestra has played for our students. Each concert in the past has tried to utilize "tricks" to hold the attention of the students and we have succeeded, if one can evaluate the attention given by students. Orchestra members, over the years, have commended that school students of the Independence schools have always been attentive and courteous. However, this venture with media gave us cause for concern because it was a new approach for our school concert, and the synchronizing of pictures and music was time consuming in its preparations.

The cost of the slides was minimal for our schools. The author had pictures of Norway and Paris in his personal collection and the use of slides from the libraries of the community and from personal friends provided us with enough material for alternate choices of slides.

The concert concluded with two musical selections again, designed to capture more than the ear. The opening fanfare of "Also Sprach Zarathustra," was played by the orchestra with the use of the pipe organ (as scored). Again, the students were exposed to the sounds of both media and the action of the organ player (many could see the keyboard of the organ).

To conclude, the students were once again made aware that music is everywhere around the world and it truly is an international language. The theme song of, "It's a Small World," from the Disney production of the same name, was used as the theme song to end our journey. It had been a successful one.

The use of media with music demands organization and planning. Besides the acquiring of media materials, the person responsible for coordinating the music and the slides must spend time listening and arranging the slides to fit the music. It often takes more than one person to view the slides to come to a satisfactory conclusion concerning the appropriate pictures for the corresponding music.

In most instances, recorded music can be obtained of the same music that will be played by a performing group and trial runs are suggested if the program is to be coordinated properly. Operators of the several projectors were made aware of the total program and the necessity of the synchronization of music and slides. High school students, knowledgeable in the use of projectors, were used as assistants and were of great help in the setting-up of the equipment for the rehearsals and the actual concert.

Conclusion

As a result of this experience, it was determined that any school system could present this kind of a music-media program. Given one screen, a projector, a quantity of appropriate slides, corresponding recordings of music, and a good record playing system, this interesting and exciting music-media program can enhance the usual sit-down-listen musical program.

This experiment in music-media concert was certainly not an experimental study, but teachers did note the reactions of students to the presentation. The author noted that the immediate audience response to the "Painted Desert" selection was more vigorous than to the two selections of "An American in Paris" or the "Wedding Day at Troldhaugen." The sights of the desert may have been meaningful to more students while the sights of Paris and Norway were interesting but not personal. Elementary school instrumental students were not all in agreement that the pictures added to the music except for "The Painted Desert." Other comments from elementary school students reported by vocal music teachers were: "Kept my attention," "We liked the slides with scenery," "The Painted Desert" was beautiful." "Perhaps pictures for one musical selection would have been enough," "Three screens were too many," "Students liked the music played in this concert," "The music was a little too much alike," "Pictures did bother some students," "Liked 'The Painted Desert' pictures and music," "Best concert, ever."
The reader can note that not all who attended the concert were impressed in the same manner. Teachers were not impressed to the same degree, but visitors to the concert conveyed the feeling to us that the pictures and music constituted an unusual experience, completely satisfying.

Comments by John Haskins, the music critic of the Kansas City Star newspaper, were a part of a birthday salute to the Philharmonic orchestra and a review of what that group of musicians do for all kinds of audiences during their performance year.

By John Haskins, Music Editor

"...There are 53 concerts for children represented in that seasonal total of 132 public appearances as a performing ensemble. It is the least publicized (unknown, unappreciated) and in many ways one of the most worthwhile activities of our resident orchestra, amounting to nearly one-half of the season's work. The statistic itself is impressive, but who among the adult audiences downtown of a Tuesday or Wednesday night at the Music Hall knows what a concert for elementary school children is like?

Set the scene. It is a raw windy day early in November. One stands at the rear entrance to the L.D.S. Auditorium in Independence just after 9 o'clock. The concert is sponsored by the Independence Community Association for the Arts and the Young Matrons Association of Independence, brought to mind Alexis de Tocqueville's famous remark, that "American's have a genius for organizing private to accomplish a public good."

It was an extraordinarily well-behaved audience that greeted associate conductor James Paul when he stepped up to the podium. Anna Rentzke of Independence, working from a script prepared by Helen Hollander of the Philharmonic's first violin section, served as narrator for the evening's program. It began with the Bach "Little Fugue" in G Minor, played first by the full orchestra in Leopold Stokowski's celebrated transcription.

The program moved to Claude Debussy's "Fetes," an Edvard Grieg musical depiction of a rustic wedding in Norway, to a Ferde Grofe evocation of the Painted Desert from his "Grand Canyon Suite," to the Paris of the 1920s as realized in Gershwin's tomal essay, "An American in Paris," and finally, to the Jamaica of Arthur Benjamin as expressed in his dainty Jamaican Rhumba. Then there was a sing-along. The orchestra played the Disney World tune, "It's a Small, Small World," in an arrangement by Lawrence Harthorn of the Philharmonic's woodwind section, and thousands of treble voices sang the simple words most persuasively.

Throughout the program colored slides were projected onto a pair of large screens to provide a visual focus suited to the music. It was a good concert, to be seen as well as heard, thoroughly entertaining and nicely paced. One left the hall knowing that catchy Disney World tune (Harthorn: "Those Disney composers seem to live on a diet of marshmallow"). It is a salutary, perhaps even a therapeutic thing, for a jazzed music critic to be exposed to a youth concert from time to time. There, in another world, he can be reassured that musical performance designed for a young audience need not be presented in a patronizing way. The emphasis - as it should be - is on enjoyment, and who can say how much of it happily carries over into adulthood.

That Independence concert was a good example of what the Philharmonic is doing in its 41st season for the youngsters.

November 25, 1973, Kansas City Star Newspaper

Script

K. C. Philharmonic Orchestra-Independence Public Schools

Good morning. I like to think of this great round auditorium as a sort of world. That's the North Pole up there (point), and the balcony rail is the equator, and here's North America, South America, Europe, Africa, and all the rest - we can't see Asia very well because it's night time there. Now in our world one language is spoken, but everybody understands because the language is music. Let's listen to our world's voice, the great Auditorium Organ played by Mrs. Delores Bruch. 'Voices,' I should have said, for it will speak through many throats - which are actually pipes, starting softly, as though just one lonely little instrument is singing, and then another will join, and another, and another, until we have a whole symphony of instruments. But notice how each instrument, when it enters, starts at the beginning of the song. It's like the beginning of a day, which is always happening somewhere in our world as it turns around the sun.

Bach Little Fugue - Exposition - Organ

If you had gone to school in Germany 300 years ago, your class might have visited a cathedral to hear the composer, Johann Sebastian Bach, playing this piece on the organ. There was no United States in Bach's time, nor did people in Germany know much about music in other parts of the world. But I like to think that Bach, in writing for what was then the world's mightiest instrument, imagined all the rich, colorful kinds of sounds made by instruments from all over the world, which were brought together after his time to form the great symphony orchestras of today. Let's listen to the K.C. Philharmonic, conducted by James Paul, performing Bach's work as he may have imagined it 300 years ago. It starts with a lovely little oboe...

Bach - Stokowski

The music of Bach has become world music. World music is great music; it brings people together, just as we are all together here from different countries and continents - so we are pretending. We could truly say the world has grown smaller!

As our world turns, it's morning in one place, right over there (point), in a little village in Southern France, near the Mediterranean Ocean, not far from Africa. Already the sun is so hot you can almost...
smell it, and so bright that the sidewalk and streets on the town square seem to shimmer. Schools are closed and everybody is there, for it's a holiday, a day to celebrate by wearing your best clothes and having spending money for ice cream or anything else you might want to buy at little stalls around the square. Laughing, excited, sunblinded, you wander about with your friends, but suddenly — just at high noon — there is a great silence. Everyone is listening, scarcely breathing, and you shade your eyes to see far off in the shimmering distance. Soon you're breathing to a rhythm — you can't tell when it started, that sound of drums and marching feet. I'll let you wait to watch the parade for yourselves. Do notice, when the parade is over and the people have gone home, the quiet little breeze that comes to blow around the dusty, empty square. It blows the litter, and somebody's forgotten cap, and the glittering particles of dust which, in the setting sun, have become golden.

**Fetes — Debussy**

We have just watched a parade in a little village on the Mediterranean. I'm sure you'll agree that, through music, our world grows smaller. Time too is quicker, for the sun — around which we keep turning — is about to rise again, this time in the North, in a wild, beautiful country called Norway. Once the land of the Vikings who first sailed around the world, Norway is still a land of ships and sea ports. Mountain rivers, called fjords, have cut deep gashes down through snow-covered rocks to wind and flow in misty freeways to the ocean.

Today we are celebrating a wedding. Already the band has assembled and fiddlers are tuning up. Notice how gay the music is, while people cook and clean and get out holiday clothes, or run out to market; and, of course, down to the wharf to buy fresh fish. Later, at the quiet little church on the mountain, we will find the bride and groom alone together for a few minutes before the ceremony. After the feasting and dancing, they will say goodbye to their beloved Norway and sail out into the sunset, like their Viking ancestors before them.

All this the music describes. Wistfully, for it is like Norway itself — a land so beautiful nobody ever really wants to leave!

**Lights Out**  

**WEDDING DAY — GRIEG**

Does music ever stop? No. As our world turns, somewhere, always, people are making music. Even in lonely places.

(Ad lib 3-note chromatic theme of Painted Desert)

How does a lonely cowboy feel as he rides through a desert near the Grand Canyon of our great West? What does he see, and as he looks, what does he imagine? The music tells the story of our world turns, this time to a day in our own U.S., in a place so awesome, mysterious, and beautiful, it has been called "The Painted Desert." How many times our world has turned to form this desert, as old as the sea for it was once a sea itself! The mystery of eternity is shown in the music's rhythm of 3, and in its theme which, as we approach, seems to have been going on — like the 'Painted Desert' itself — and will go on, forever.

**Painted Desert — Grofe**

In all the world, could any city be gayer and busier than Paris! As our world turns, it's right over there (point) where the taxis are honking —

(Sound taxi horn several times)

— taxis carrying crowds of tourists to see famous buildings, arches, churches, fountains, parks, restaurants, cafes, theatres, night clubs, and, well, everything is famous in Paris! And everyone is stylish and gay.

(American in Paris — Gershwin; to fermata at 1st cut)

But there is one American tourist, a composer named George Gershwin, who is homesick! Wherever he goes he keeps hearing inside of him the music he loves — the blues, made popular by the playing of black musicians in his United States. Could anything be more American in Paris!

(To second cut)

Finally, tired of sight seeing, while sitting in a Paris street cafe, our American tries to cheer himself up by imaging he is on New York City streets listening to jazz.

(To third cut)

George Gershwin's music has become world music, for it is loved everywhere. But especially in Paris!

(Finish, American in Paris)

Lights on again
As our world turns once more, there is just enough time to visit a country near the equator, in a little group of islands known as the West Indies. One of them over there (point) is called Jamaica, a tropical land of sugar cane, coffee, coconuts, citrus fruits, bananas. And beautiful music! Perhaps as famous as American jazz are the Jamaican dances called ‘rumbas,’ with their many kinds of rhythm instruments — instruments which would have defied the imagination of Johann Sebastian Bach! They have become a part of every symphony orchestra, and so a part of world music.

(Ad lib rhythm of Jamaican Rhumba)

As you listen to these instruments, you might see how many you can recognize. Notice especially — which instrument plays the very last note.

Jamaican Rhumba — Benjamen

Did you hear the last note? Let’s hear it again. Yes, the tympani!

Today, with this great round auditorium as our world, we have been able almost to reach out and touch our neighbors in other countries — to be with them, and even to speak to them, through the mighty international language of world music.

(Opening to Zerathustra — Strauss)

But there is another international language, a terrible language, yet one everybody understands. That language is war! In every country out there (point), let’s all stand and sing a song of the small, small world we have known today, which can be some day — if we all keep singing the beautiful language of world music — a world of peace!

It’s a Small Small World

The main objective of the dissertation is the organization of the content of music learning in Grades Kindergarten through Nine with a change of emphasis in the method of teaching. The structural, conceptual approach implies two things: (1) that the organization of the subject matter to be taught be based on the intrinsic structural dimensions of that subject; and (2) that learning experiences be planned so that the learner can conceptualize these intrinsic dimensions, their function and interaction.

The structural, cyclic theories of Jerome Bruner provide the organizational foundation of the subject matter of music for this work. The paper contains (1) a clear definition of the structural dimensions of music that is applicable to all music, whatever its origin; (2) a statement of what there is to learn about these dimensions and their interactions that can feasibly be taught from kindergarten through the ninth grade; (3) a spiraling order of the material to be taught from the easiest to the most difficult.

The bulk of the dissertation consists of lessons based on specific musical works, eighteen lessons for each grade level. The core activity of the lesson is listening, with other musical activities used in so far as they contribute to aural perception abilities.

The curriculum is designed for the average student, not only the one who shows special interest in music. Its long range objective is the ability in each student to make objective factual judgments about the music he hears.

Theories of Jean Piaget regarding child development underlie the choice of activity and method of student involvement with music at various age levels. Theories of David Ausubel regarding readiness, discovery, and practice underlie the selection of teaching method and the sequence and frequency of the encounters with specific material.

The actual music used in the lessons represents every historical era, a variety of musical media, and various ethnic sources.
Abstract

AN UNGRADED GUIDE TO THE ORGANIZATION OF THE ELEMENTARY GENERAL MUSIC CURRICULUM IN THE PUBLIC SCHOOLS

Rosalyn Harris Ball, Ed. D.
Washington University, 1973

The primary objective of the paper is to construct an ungraded elementary general music spiral curriculum for the public schools. The philosophies of pragmatism and instrumentalism were studied in conjunction with aesthetic principles and their relationship to music education. From this examination evolved a personal philosophy which guided the development of this curriculum. In addition, the learning theories of Jean Piaget and Jerome S. Bruner, and the theories of instruction of Asahel D. Woodruff were examined because of their relevance to current thought and practice in music education.

A complete description of the basic aims and goals of the music curriculum is given, relating the difficulties in writing and achieving behavioral objectives in music education, the function of those aims and goals, and the process involved in formulating the aims and goals of music education. In addition, the music activities to be developed in elementary general music education are described.

A complete elementary general music spiral curriculum is given, containing the following dimensions: Rhythm, Dynamics, Form, Pitch Organization, Timbre, Texture, and Simultaneity. Objectives, materials needed, teaching strategy, musical activities utilized are given. The curriculum is constructed in seven cycles with an ungraded approach to music learning.

Finally, a description is given of the music personnel needed for the implementation of such a curriculum, including a director, supervisory staff, and teaching personnel, the role of each, and the qualification that each staff member should possess.

Finally, supervisory problems relating to the successful functioning of the elementary music curriculum are discussed in some detail.

Abstract

THE MISSOURI HARMONY, 1820–1858: THE REFINEMENT OF A SOUTHERN TUNEBOOK

Shirley Ann Bean, D.M.A.
University of Missouri-Kansas City, 1973

The tunebook and the singing school emerged as two of the most important developments in early-American music. Allen D. Carden's, The Missouri Harmony, was one of the outstanding shape-note collections from the first half of the nineteenth century and the first tunebook from Missouri. Carden traveled west in the year 1820 to establish a singing school in St. Louis, and subsequently compiled the tunebook for use in his own classes. At that time, however, St. Louis did not possess a font of type for setting shaped notation and the actual printing took place in Cincinnati.

Between 1820 and 1858, there appeared nine editions and twenty-one issues of Carden's book. Editions were repeatedly designated as "Revised and Improved," "Latest Improved Edition," or "New Edition, Revised, Enlarged and Corrected." A note-by-note comparison of all editions was made to establish the authenticity of these repeated claims of editorial revision. It was found that the first eight editions were characterized by simply a resetting of type but contained no changes in the musical aspects of the tunes or their settings. The revisions were in the form of correcting printing and notational errors (e.g., incorrect shapes, inaccurate placement of a note on the staff, notes inadvertently placed in the press upside down, and so forth).

In 1835, a Supplement specifying "By An Amateur," was added to The Missouri Harmony. Effort was made to determine the identity of this "Amateur." Although insufficient existing records prevent positive identification, Timothy Flint has been advanced in this paper as a possible candidate. The Prefaces to Flint's tunebook and that of Carden contain identical statements and similar objectives. Flint had numerous occasions to become acquainted with both Carden and his tunebook, and was active in Cincinnati in 1834, just prior to the publishing of the 1835 edition of Carden's book. The Supplement contains "a Number of Admired Tunes of the Various Metres, and Several Choice Pieces, Selected from Some of the Most Approved Collections of Sacred Music." In contrast to the other sections of The Missouri Harmony, the voice parts are designated in each selection and the treble voice is assigned the tune.

The revising of the ninth edition in 1850, was undertaken by Charles Warren at the request of the publishers. Warren was a noted Professor of Music in Cincinnati at the time and described as a "scientific musician." While Warren retained the tunes and general
format of Carden’s book (including the complete theoretical introduction), the settings were found to be quite different. The Missouri Harmony, a southern tunebook, had become “northernized” through the refinements made by Warren. Gone were the parallelisms, unprepared and unresolved dissonances, incomplete and ambiguous sonorities, regressive patterns, and lack of coincidence between strong textual and metric accents. The settings were polished and refined.

An examination of the changes taking place in the musical and academic life of the period revealed the necessity for Warren’s revisions. His refinements clearly represented the efforts of a northern, “scientific musician” to retain the popularity of Carden’s four-shape collection while confronted with the rising competition from seven-shape collections, the progressive improvements espoused by the academic musical practices (forged originally by Timothy and Lowell Mason), and the growing refinement of taste on the part of the public by the middle of the nineteenth century.

Abstract

ELEVEN SELECTED WOODWIND CONCERTOS
OF JOHANN MELCHIOR MOLTER

Raymond E. Martin, D.M.A.
University of Missouri-Kansas City, 1873

The present dissertation is an exploration of eleven woodwind concertos of one of the neglected composers of the early eighteenth century, Johann Melchior Molter (ca. 1695-1755). The works examined comprise three flute concertos (HSS 314, 315, and 326), three oboe concertos (HSS 305, 312, and 313), one bassoon concerto (HSS 341), and four clarinet concertos (HSS 302, 304, 334, and 337). Of these works, only the clarinet concertos are available in modern edition; the rest lie in manuscript in the Badische Landesbibliothek in Karlsruhe, West Germany. In order to present a useful, comprehensive study, the seven manuscript works were placed into a modern edition.

The dissertation is in two volumes: Volume I contains background material on Molter and an analysis of the instrumentation, form, rhythm, harmony, and melody in each of the eleven concertos; Volume II contains an edition of the seven flute, oboe, and bassoon concertos, prepared from microfilms obtained from the Badische Landesbibliothek Karlsruhe. It is the editor’s intent that the edition preserve the composer’s indications as closely as possible.

Molter’s instrumental writing includes idiomatic solo parts, some of which require performers of a high artistic level. His scoring for ripieno strings, though less exacting, nonetheless challenges with diatonic runs, rapid reiterations, and occasional melodic skips. Orchestral textures, primarily those which support the soloist, are often subtly varied with diverse instrumental combinations.

Each work analyzed possesses five staves of score — soloist, violin 1, violin 2, viola, and basso, and all follow the three-movement, fast-slow-fast plan of Torelli and Vivaldi. Molter prefers, in his opening allegros, five or more tutti in the progressive Vivaldi style; his second movements allow maximum solo exposure, the tutti often serving simply as prelude, postlude, and interlude; the finales normally abound in tutti, may be binary or non-binary, and usually are more orchestral than soloistic. The simple regularity of the throbbing basso-continuo is the principal rhythmic characteristic, with more progressive rhythmic ideas expressed by streams of patterns (i.e., triplets, dotted values, Lombards, syncopations, etc.) and intensified through after-beats, anacruses, and phrasing irregularities.

The keys of the concertos are both diatonic to the solo instruments and functional in their harmonic relationships. Molter favors the tonic-relative minor-tonic relationship between movements. Within each movement the series of key centers customarily reflects the pattern, tonic-dominant-mediant (or sub-mediant)-dominant-tonic. Unusual dissonance and modulatory interest are found in a few instances. Homophony rules the harmonic texture, with only rare samples of contrapuntal employment.

In melodic terms Molter shares with his peers the disposition toward firm, key-establishing themes in his opening movement tutti. Typically, his finales themes are dance-like. He tends to offer contrasting themes in tutti and solo, a penchant which anticipates the Classical principle of thematic contrast. Lyricism is displayed in the slow movements, and the uncommon beauty of these acquiços is most impressive.

The conclusion derived from this study is that Molter was an excellent composer, adventurous in his use of instruments, craftsmanship in his application of existing compositional traits, and intensely expressive in his handling of slow movements. Woodwind instrumentalists have rarely been served as well by one composer, and to the limited repertory for that group of instruments, Molter’s works may be commended with dignity.
Abstract

TWENTY-ONE AVANT-GARDE COMPOSITIONS FOR CLARINET
PUBLISHED BETWEEN 1964 AND 1972: NOTATIONAL
PRACTICES AND PERFORMANCE TECHNIQUES

Nicholas J. Valenziano, D.M.A.
University of Missouri-Kansas City, 1973

The three principal objectives of this study are as follows: first, to
examine the notational practices used for the clarinet in twenty-one
avant-garde compositions published between 1964 and 1972; second,
to examine the performance techniques found in the clarinet parts
of these compositions; third, to organize the resultant information as a
compendium and guide to avant-garde clarinet music for advanced
clarinet students, teachers, and performers.

The scope of this study is limited to pieces which fall into one of
the six following classifications: (1) compositions for clarinet alone;
(2) clarinet and piano; (3) clarinet and percussion; (4) clarinet and
tape; (5) clarinet with ensemble (only four players); (6) compositions
for unspecified instruments. Publishers, composers, professional
clarinetsists, and university clarinet instructors/performers were asked
to recommend for this study compositions published between 1960
and 1972 which contained new notational practices or performance
techniques, such as multiple sounds, key clicks, and special articula-
tions. Additionally, a thorough examination was made of the clarinet
music in the libraries of Northwestern University, the University of
Chicago, and the University of Missouri-Kansas City.

The criteria resulted in the following twenty-one compositions: B,
a, b, b, it, t by Donald Martino, Concert Music for Solo Clarinet by
John Eaton, Mosaic by Hans U. Lehmann, Revolutions by Paul
Zorn, Strata by Donald Martino, Variants For Solo Clarinet by
William O. Smith, Aria No. 1 by Elliott Schwartz, Barnard I by
Barney Childs, Current by Larry Austin, Diversions by David
Eddleman, Essays In Sound by Jeno Takacs, Drawings: Set No. 3 by
Sydney Hodkinson, Essence Of Ampersand by Raymond Weisling,
Sources III by David Burge, Entropic Islands by Roberto Laneri,
Piece for Clarinet and Tape by Edward Miller, Doubles by Don M.
Wilson, Echo by Lukas Foss, Free Music by Stanley Lunetta,
Graphic Mobile by M. William Karlins, and Towers by David Cope.

In Chapter I, the twenty-one compositions are discussed in
alphabetical order by title within the six aforementioned classifi-
cations. The compositions are identified by title, composer, publisher,
and date of publication. The annotation of each composition
includes the following: general appearance, range, tempi, dynamics,
performance directions, duration, type of staff, pitch, rhythm,
notational symbols, and a general summary.

In the discussion of pieces for clarinet and piano, clarinet and
percussion, clarinet and tape, and clarinet with ensemble, the
emphasis is primarily on the clarinet part. Information relative to
the function of other parts is included only to show relationship to
the clarinet part and/or to aid in the understanding of the overall
background of a particular work.

Chapter II contains three different indices of all notational
symbols found in the compositions selected for this study. The first
index includes symbols employed to indicate performance
techniques such as multiple sounds, key clicks, and special articula-
tions. The second index includes symbols used to indicate various
musical parameters, such as dynamics, tempi, and pitch. The third
index contains combined performance techniques, such as air sounds
with key clicks, flutter-tongue with trills or tremolos, and multiple
sounds with glissandi.

The nature of this study dictated the use of numerous musical
cerpts and notational symbols. All musical excerpts and most
notational symbols have been photocopied to aid in the presentation
of this paper.

Abstract

SOME PROBLEMS OF OPERA PRODUCTION IN THE
SMALL COLLEGE AND SELECTED APPROPRIATE REPERTOIRE

Charles H. Weedman, D.M.A.
University of Missouri-Kansas City, 1973

Purpose. — The purpose of this paper is to (1) discover and
identify some of the problems faced by those who produce opera in
small colleges and (2) to examine and present a variety of operatic
literature suitable for use in this kind of situation, including the
production requirements.

Procedure. — It was anticipated that in the small college situation
there would be difficulties in following the accepted patterns of
operatic production due to possible limitations in almost every area:
singers, orchestra, theatrical facilities, production staff, and finances.

Two questionnaires were sent to the operatic directors of
representative small colleges in an effort to obtain an indication of
the problems actually encountered. The first inquired about
problems the respondents encountered in five areas: singers,
orchestra, theatrical facilities, production staff, and finances. The
second requested information regarding specific operas produced by
the respondents and some of the production details, how each opera
was accompanied, if it was staged, and if there were cuts made in the
score.

Using the results of the questionnaire responses as a guide, selected
examples of small-scale operas and opera scenes were examined. These works required a small number of singers of advanced ability, small orchestral resources, and limited theatrical resources. Thus, because they minimize or eliminate many of the production problems faced by small college opera producers, the chosen examples represent the best type of literature for the small college opera producer to utilize.

Result. — The following conclusions were reached: (1) A majority of the small college opera producers responding to the questionnaires do have problems in each of the five areas covered: singers, orchestra, theatrical facilities, production staff, and finances. (2) By careful selection of the repertoire used in his program, the small college opera producer can either alleviate or avoid these problem areas and thus maintain a viable program of opera in his situation.

Abstract

A STUDY OF PAUL HINDEMITH'S USE OF THE TROMBONE AS SEEN IN SELECTED CHAMBER COMPOSITIONS

James D. Willis, D.M.A.
University of Missouri-Kansas City, 1973

The purpose of the dissertation is to analyze and compare the scoring techniques used in the trombone parts in Paul Hindemith's chamber works. The ten compositions in the study include all the chamber works in which the trombone was scored and were analyzed in terms of the following criteria: pitch range and tessitura, dynamic range, melodic interval frequency and pattern frequency, types of articulation, trombone solos, trombone as the bass voice of the ensemble, special techniques employed, and the B♭ tenor versus B♭-F tenor trombone. The conclusions found in the analysis of the above criteria are summarized in the final chapter of the study.
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M.B. All contributors are advised to keep a copy of any manuscript submitted. The Editorial Committee cannot be responsible for loss of manuscripts.

Published by Missouri Music Educators Association

PREFACE

The Missouri Journal of Research in Music Education, published by the Missouri Music Educators Association, is devoted to the needs and interests of the school and college music teachers of Missouri and the nation. This issue, Volume III, Number 3, is the thirteenth to appear in as many years.

The members of the Editorial Committee are grateful to those readers who have written suggestions concerning the content of past issues and request that criticisms and suggestions, always welcome and never unheeded, again be sent to the Editor concerning the content of this issue. We strive for a reasonable balance among music theory, history, philosophy or aesthetics, and pedagogy. It is difficult to judge how successful we are without reader response.

Since this publication is not copyrighted, complete articles or excerpts from articles may be made without securing permission from the editor or the authors. It is requested that credit be given to the Missouri Journal of Research in Music Education.

We express our deep gratitude to the Missouri Music Educators Association and to its president, Dr. Wynn Harrell, for so generously shouldering the Journal's financial burden to make it possible to continue to publish the Missouri Journal of Research in Music Education.

The Editorial Board
VERBAL-DESCRICTIVE AND PERFORMANCE RESPONSES OF KINDERGARTEN CHILDREN TO SELECTED MUSICAL STIMULI AND TERMINOLOGY

Norma van Zee

(This paper is based on the author's doctoral dissertation of the same name presented as partial fulfillment for the requirements of the Ph.D. degree at the University of Iowa, 1974.)

Today emphasis is being placed on the importance of music activities in the early childhood years and teaching and curricular models are receiving serious attention. 1 Of immediate value and use to music teachers then, would be information about the musical understandings or concepts held by kindergarten children and how they can best express these understandings. Little concrete information is available due primarily to the difficulties encountered in conducting research with the child of this age and the lack of appropriate assessment techniques and instruments.

The problem of this study was concerned with the comparative value of verbal-descriptive and performance responses of kindergarten children to selected musical stimuli and terminology.

The study was designed specifically to assess the ability of a random sample of kindergarten children to: 1) aurally discriminate differences in pitch, melodic contour, duration of tones, and rhythm patterns in selected musical stimuli, 2) verbally describe these discriminated differences, and 3) demonstrate understanding of terms commonly used to describe pitch, melodic contour, duration of tones, and rhythm patterns through demonstration on a simple keyboard instrument. The study was also designed to gain information on possible relationships between the variables of socioeconomic background, sex, and chronological age and the types of responses and resultant understandings identified above in items 1, 2, and 3.

MATERIALS

Two exploratory trials and a pilot study were conducted in the development and selection of the test items and procedures that made up the test battery used in the final study. Test A consisted of two sections (Test A-1, Test A-2) which required aural discrimination and verbal-descriptive responses to test items. The second test, Test B, required performance responses through which the children could demonstrate, on a simple keyboard instrument, their understanding of the musical terms used as criteria in scoring the test items in Test A-2. The item groups in each test included questions concerning pitch, melodic contour, duration of tones, and rhythm patterns.

Test A-1 was designed to assess the ability of kindergarten children to discriminate differences in pitch, melodic contour, duration of tones, and rhythm patterns in terms of "same" or "different" on paired items. Each item-group was preceded by a brief explanation of the task involved and a practice item. For purposes of this study, rhythm patterns were defined as arrangements of musical sounds into organized units of tones of equal durations, equally spaced (even), or unequally spaced (uneven). There were nine items each in the pitch and melodic contour groups and five items each in the duration of tones and rhythm pattern groups.

Test A-2 consisted of the investigator asking each child "How is the second sound (tune) different?" when a "different" answer was given in Test A-1 and was the correct response. Terms considered correct were high, low, up, down, straight across, long, short, even, uneven, smooth, jerky. The terms were those recommended for use with similar musical stimuli in current teacher's manuals and music books for kindergarten children. 2

Test B assessed the children's ability to demonstrate understanding of the criteria terms used in Test A-2 through performance on a simple keyboard instrument (Magnus electronic organ). Twenty-two items were developed for this test. The first ten items were paired items using contrasting terms in the same item-group; the remaining twelve items were presented in random order. Reliabilities for the two tests (Test A, Test B) were assessed by computing Spearman-Brown prophecy formula reliability coefficients using the split-half technique and adjusted through use of the Spearman-Brown prophecy formula. Reliability coefficient for Test A was .71 and .80 for Test B. Content validity was assessed by having experts compare the test items with musical figures found in kindergarten song material.

In addition to test scores and recorded verbal and performance responses made on the two tests, information on each child's age, sex, socioeconomic background as reflected by the school attended, and history of his kindergarten musical experiences was obtained through a teacher questionnaire designed by the investigator.

PROCEDURE

The eighty children tested in the study were randomly selected from four public schools in the Midwest designated by location as rural, urban (two), and suburban. One of the urban schools, School B, was classified as an educationally deprived school under the provisions of the Elementary and Secondary Education Act of 1965, Title I. An equal number of boys and girls was selected from each school.

The testing was done on an individual basis. Forty-five minutes were allowed for each child. The test items, spoken, sung and/or played on the electronic organ, were presented to the subject on tape. His verbal and performance responses were recorded on a second tape recorder and by the investigator on a specially designed scoring form. Overt responses, made to supplement verbal
responses, or in lieu of them were also recorded during the testing session by the investigator. The Magnus organ, used by the children to make their performance responses, proved to be a highly motivating factor in the testing situation.

RESULTS

A compilation of raw data from the subjects test scores showed that the total number of correct responses for every test item in Test A-1 was consistently greater than the number of incorrect responses as shown in Table 1. This suggests that the discrimination tasks were not difficult for kindergarten children. The pitch items proved to be the least difficult of all.

In the "pitch-item" group the smallest intervals (major and minor seconds) were the most difficult for the children to discriminate. The tonic chord pattern proved to be the most difficult item in the "melodic contour" group. The least difficult items were those that paired a pattern of repeated tones with a pattern moving up or down by steps. For the "duration of tone" group items, the children had less difficulty identifying differences in the items containing eighth-note patterns than those which contained half-note patterns.

In the "rhythm pattern" group, the unevenness created by the relationship of dotted quarter to eighth notes or half to quarter notes and their order in the paired items had little effect upon the difficulty of the item.

Table 2 shows that the number of incorrect responses on each item in Test A-2 exceeds the number of correct responses. These figures indicate that the verbal-descriptive tasks were much more difficult for the children than the discrimination tasks in Test A-1. Not one of the children was able to correctly describe the differences in the rhythm pattern items.

Table 3 shows that on Test B the mean number of correct responses in each item-group exceeds the mean number of incorrect responses, with the exception of the "melodic contour" group. This would seem to indicate that a majority of the children did understand much of the terminology used in the test as shown by their performance responses.

In comparing the verbal-descriptive responses (Test A) and the performance responses (Test B), it can be seen that many children who could not verbalize the perceived differences using the criterion terms could demonstrate their understanding of the meaning of those terms through their performances.

The data from this study were treated statistically in several ways. A regression analysis determined that there was no relationship between chronological age and test scores. An analysis of variance performed on the test scores of the two tests, Test A and Test B, revealed that the type of response required, school, and sex were all variables that had statistically significant effects upon the test scores of the subjects. These results are found in Table 4.

Test B (performance responses) produced the highest mean proportion of correct responses. This resulted primarily from the scores on the duration and rhythm pattern items. It appeared that the terminology used to describe pitch and melodic contour is more easily understood than that for duration and rhythm patterns. The children in the urban school, School C, showed the highest level of achievement and those in the urban Title I school, School B, the lowest achievement level on the total test battery. The boys produced superior test results in all the schools.

A study of the verbal responses given in Test A-2 was made to determine whether a common characteristic vocabulary was used by the children. None was found. Rather they tended to be very imaginative and creative in their descriptions. The most frequently confused terms were associated with musical pitch. Twenty-five percent of the children used the terms "loud" or "soft" when describing pitch differences of paired tones. When asked to describe pitch direction of tonal patterns, thirty-five percent of the subjects interchanged "high" with "up" and "low" with "down", indicating inexperience with the more precise use of these terms. The children had much more difficulty verbalizing differences noted in duration and rhythm pattern items. Terms related to time, space, and quantity were commonly used to indicate duration values. The children tended to describe individual tones rather than the total pattern on the rhythm pattern items. Fifty percent of them used the terms "long" and "short" to describe single tones in the pattern.

The largest number of verbal responses came from children whose rhythm activities had been included in their classroom music program as indicated on the teacher questionnaire. It would seem that movement was providing a substructure for an intellectual response.

Forty-six percent of the children participating in Test A-1 used overt responses to supplement or in lieu of verbal responses. Seventy-five percent of these responses were singing responses. The children in School B, the Title I school, more often used overt responses in lieu of verbal responses. The children in School C, the urban school, showed the greatest verbal facility but used many hand and/or body movements to complement and supplement their verbal responses.

CONCLUSIONS

From results of this study it appeared that:

1) Kindergarten children appear to be more efficient in demonstrating understanding of duration of tones and rhythm patterns than in verbally describing them.
2) Children of this age are quite susceptible to training in musical discrimination.
3) Physical movement and other kinesthetic approaches play an important role in developing musical understanding.
4) The factors of sex and socio-economic background may be significant variables in the ability of kindergarten children to perceive and express understandings of properties of musical sounds.

5) The musical terminology commonly used with kindergarten children is not necessarily a part of their vocabulary but must be learned.

6) The ability of kindergarten children to deal verbally with properties of musical sounds does not necessarily develop concurrently with their ability to perceive and understand them.

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**TABLE 1**

TEST A-1: NUMBER OF CORRECT AND INCORRECT RESPONSES

<table>
<thead>
<tr>
<th>Item</th>
<th>Pitch</th>
<th>Contour</th>
<th>Pitch</th>
<th>Contour</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Correct Responses</td>
<td>Incorrect Responses</td>
<td>Correct Responses</td>
<td>Incorrect Responses</td>
</tr>
<tr>
<td>1</td>
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**TABLE 2**

TEST A-2: NUMBER OF CORRECT AND INCORRECT RESPONSES

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<th>Contour</th>
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<td>Incorrect Responses</td>
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</table>

1. Equals the number of correct "different" responses on Test A-1.

* Items not requiring verbal descriptions ("same items").
<table>
<thead>
<tr>
<th>Category</th>
<th>No. of</th>
<th>Mean Number of Correct Responses</th>
<th>Mean Number of Incorrect Responses</th>
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</thead>
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<td></td>
<td>Items</td>
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N=80

### TABLE 4

**ANALYSIS OF VARIANCE: TYPE OF TEST**

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<tr>
<th>Source</th>
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<th>SS</th>
<th>MS</th>
<th>F Value</th>
<th>p</th>
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<td>.85</td>
<td>.5263</td>
</tr>
<tr>
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<td>79.49</td>
<td>.49</td>
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</table>

### FOOTNOTES


3. For purposes of statistical analysis, Test A-1 and A-2 were treated as one test (Test A).

### PERSONALIZED INSTRUCTION: SOME REASONS WHY

Sister Tobias Hagan  
Fontbonne College

(This paper was presented at a research session of the MMEA in 1975).

This article exposes the process which precedes research, the positioning of an intuitive theory. It contains speculation about the future and proposes a theory as yet untested by research about what skills people will need in future lives and how educators can best assist the development of those skills.

Before selecting any method of instruction it is important to consider what the students will learn, what process will help them to learn most efficiently and effectively, and what life related value both the content and the method of instruction have for the student. To assess life related value it is necessary to look carefully at what the future may be like and what affective skills or skills in human interactive functioning the students will need.

### TWO OPPOSING WORLD VIEWS OF THE FUTURE

The futurologists offer us perceptions of the future based on certain observable trends of the past and present. Two extremes in these views are presented here. The time line for both of these views has 1985, a not too distant date, as the approximate time when these projections will be realized.

One view has the complexity of technology increasing to the point that man becomes totally dependent on machines for survival. Machines (meaning all mechanical devices) exercise increasing control over man's actions. It is true that men will invent and control the machines but it is also true that the mass of men--their political and economic structures, their transportation, recreation, healthful living, etc.--will not survive without the assistance of machines.

In this situation a certain depersonalization and anonymity occurs. Anonymity of person is intensified by the fact that people will be very mobile, moving from one place to another frequently and moving from one job to another. It will be quite normal for an individual to experience three or four careers in one lifetime. This mobility will be possible partly because we will have learned to control our immediate environment sufficiently so that even radical changes from one climate to another will require little real adjustment.

Mobility will require that people be able to establish relationships with other people on a short term basis. Meaningful relationships will have to be intense because they will not be enduring over a long period of time.

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The opposite view sees technologic and economic structures increasing in complexity so drastically that they gradually solidify and cease to function; they, so to speak, "blow up" much like an engine that has no oil or coolant heats up and explodes into flames. When this occurs man will experience a thrust into a caveman-like existence where his own ability to cope with the new machineless, organizationless environment will determine his survival. Some forecasters say that those who have been extremely dependent on technology and have lost their ability to adapt (to mutate, to change significantly) will not survive. Those who will rebuild civilization will be those who were the least dependent on technology--aborigines in Australia, the so-called "lost" tribes of the Philippines, and, hopefully, those of us who have made ourselves adaptable by conscious choice.

In this situation people will be extremely dependent on the other people in their immediate vicinity. Anonymity will not be allowable because it will not be viable. People will need to know how to sustain long-term relationships with the few people in their immediate circle. Mobility will not be a factor because people will only be able to travel as far as they can transport themselves by walking or animal transportation. Stability will be imposed by the exigencies of the situation.

Both of these views hold threats to existence as we now experience it. They are extreme views but point to aspects of future society. The reality will probably lie somewhere in between these extremes. However, considering the ability of present students to cope with aspects of these situations leads this writer to conclude that schools and teachers need to place greater emphasis on the development of affective or intuitive skills, the skills which contribute to effective human functioning. For satisfactory existence in the first case and survival in the second, people will need skill in human functioning.

IDENTIFYING SOME HUMAN FUNCTIONS

The term "human functioning", in this paper, has no connotation of biological or physical functioning. It means those actions and attitudes which help a person have proper self-esteem, help him relate to other people, the environment, a job, a problem, and help him identify his values and goals. The term is used interchangeably with "life skills".

One significant human function is relating with other people. All persons have various communities of people with whom to relate. These communities can be represented by a series of concentric circles.
Ours is a pluralistic society with continuous choices to be made. Often the choice is not merely between good and bad but which is better among many goods. Many choices are morally inconsequential; the values are simply for what is best for an individual at a certain time in certain circumstances. Good decision-making is not a natural ability but comes with practice. To make a good decision it is necessary to know oneself and one's values and interests and to know something about the things among which one is choosing—self-awareness, values, knowledge.

It is somewhat frightening to realize that many students have to make life-related decisions, such as whether to use drugs or not; what career to pursue; or what college to attend, with very little experience in decision-making. It would be better if they could practice the process of decision-making in non-threatening situations before having to make decisions which may affect the whole conduct of their lives.

Problem-solving is generally a combination of two functions: decision-making and task orientation. Most problems require a decision about a plan of action which must be carried out to effect a solution to a problem. Learning in elementary school might be viewed as a continuous sequence of problem-solving situations. However, if the process is not recognized as a life skill, it may be used merely as an exercise that is helpful in learning a given body of knowledge.

Realistic goal setting is a life function that combines several human functions: decision-making—deciding what is to be accomplished; self-awareness—assessing one's own capabilities in relation to the goal; task orientation—seeing what action will be necessary to reach the goal.

Value identification is another human function. It is a necessary requisite for decision-making since good decisions are made from a framework of the values an individual holds. Schools are recognizing an obligation to deal with values. Some are proposing teaching values, a practice which this writer questions. Established primarily by interaction with society—family, church, neighbors, the mass media. School has a part in this but surely a minor part. The family is the unit from which values should spring; there is not sufficient agreement on the values which should be taught for a public school to undertake this task.

Identification of values is a process which can be learned appropriately in school. It is important for people to verbalize the values they hold. Until and unless this has been done, the values remain somewhat amorphous and are virtually useless for decision-making.

Pervading these and all other human functions are two notions. The first is self-awareness/world awareness, i.e. the idea that one's own relative significance and insignificance is the world milieu, proper, and correct perspective of oneself. As self-esteem develops, one becomes convinced of one's own worth. Such conviction of worth is correct and proper because it is true that each person is important. The decisions of each person eventually coalesce with the decisions of others to become societal decisions. This process takes place over a long period of time, but it is nonetheless a true occurrence. Recognition of this supports one's concept of self-importance in historical time, past and future.

However, all one's actions and decisions are made in a relational context. One cannot make decisions without regard for the consequences to others, both those living now and those who will live in the future. Thus self-importance is tempered by recognition that each person is one of many living now and of many who have lived and will live in the spectrum of historical time.

The second pervasive notion concerns internalization of motivation. Values, the ability to direct oneself from inside out, not merely cope with external forces. At present, society in general is conditioned to respond to external motivations. In education the most significant of these is grades, but society at large responds strongly to others: changes in fashion, advertising, laws, norms of dress for certain occasions, etc.

Response to external motivation is not necessarily bad, but if people become so conditioned to it that they respond to little else, some evils result. The possibility of political "brainwashing" becomes imminent. The death of creativeness may result. Basically, a person expects recognition and reward for significant efforts. Recognition and reward are external motivations. If people become so conditioned to external rewards that they no longer produce anything without them, a richness in our culture would fade. All the small creative efforts by those who participate in, e.g., the arts, would be nonexistent. Some evidence of this can be seen in many children's lack of ingenuity at play. They have been conditioned to vicarious entertainment by the television set and find it difficult to initiate ideas from within themselves.

RAMIFICATIONS

What have these lengthy musings to do with personalized instruction? Simply this! It appears that a better vehicle to develop skill in human functioning than the traditional method of large group teaching. Conventional teaching in large groups (25 or more) has built-in anonymity and vicarious involvement for many of the students much of the time. It is simply not as efficient nor as effective in helping each student to develop skill in human functioning as a more personalized approach. One cannot learn to make decisions effectively if they are always made for him or if he usually just watches the process done by others. Exposure to perception and recognition of the process of steps in learning, but without the further step of manipulation (doing it oneself) no real control of the learning occurs. This control must be established if the individual is to be able to exercise the learning independently and to be able to transfer it from one applicable situation to another.
Personalizing instruction is not difficult. If a teacher's mind is consistently attuned to developing life skills, small, subtle changes will occur in the teaching strategies, e.g., clapping the rhythm of the syllables in their names is a common activity for kindergarten children. The mere addition of grouping names with the same number of syllables—Mary, Gerald, Jimmy, etc.—to this activity introduces a self-awareness/world-awareness notion. The students see a relationship to one another, the simple one of sharing two-syllable names.

The above is an instance of personalizing instruction within a large group. More significant opportunities occur when students work individually or in small groups on self-paced units, in contracted mini-courses, multiple activity classes, and the like.

The following is the cover page of a self-paced unit on American Musical Theater.

THE AMERICAN MUSICAL THEATER

I. Aim: The aim of this course is to: 1) trace the development of the American musical theater from the minstrel show to the present-day Broadway musical including the Rock musical; and 2) to become acquainted with several musicals through their plots and selected musical excerpts.

II. Equipment: Filmstrips and records (History of the American Musical Theater)
Various musicals (records)
Musical scores
Worksheets

III. Procedure: 1. Follow the time schedule as to what records you will have at a specified time.
2. There are worksheets for each musical and for the filmstrip set, History of the American Musical Theater. All are titled. Fill out these worksheets as you listen to each record.
3. Choose 4 of the 9 musicals listened to; these will be turned in. They will be graded on content.
4. There will be a final test which will be taken from the worksheets that accompany the filmstrip set.

IV. Time Schedule: Each teacher should make her own time schedule. The course should begin with the filmstrips. One lesson for each strip and one lesson for each of the musical shows. However, should the teacher wish to supplement the material given in the course with ideas and materials of her own, thus expanding the course, she may do so. The important thing is that a schedule of dates for the completion of each phase should be set and adhered to.

V. Most of the worksheets may be checked by each person individually. They need not be turned in. The final test, and the four chosen musical worksheets, will be turned in and used for the semester’s exam mark and final grade.

The plan shown is an excellent example of task orientation. A student using this packet has a good model to follow. The aims are stated as an example of realistic goal setting. Outlining aims, equipment, and procedure shows the student the components of task orientation. Decision-making is practiced in the selection of worksheets to be turned in for teacher grading (III, §3 and 5). Decisions about the order in which the nine musicals will be studied have to be made. If a choice among several self-paced units is offered, a more important decision-making opportunity is given.

Following the time schedule for availability of recordings (III, §1), implies that consideration of other people’s needs may be necessary. Certainly sharing equipment such as record players, filmstrip projectors, etc., incorporates consideration of one’s needs in relation to others. If students choose to do the self-paced project in a small group rather than individually, human relations will become a more significant part of the learning experience.

Though the plan of the project is specific, students will have to be self-motivated to do the work. They will not be doing things at the same time as others and will have to show initiative in planning and completing their work. Self-direction is not an easy thing for students who are accustomed to large group instruction. The teacher is a resource to help them toward this skill.

Many personalized teaching strategies might be analyzed to show how they offer students direct exercise of life skills. Further analysis of educational practices to identify those that thwart development of skill in human functioning needs to be done. Educators are engaged in a continuous process of evaluation and adaptation. Many have moved toward an immersion in personalized instruction.
The efficiency and effectiveness of their techniques are enhanced by their understanding of why they do what they do. Teachers are interested in helping students develop life skills as well as in helping them acquire specific knowledge. This paper has attempted to relate development of life skills to method of instruction. The theory has not been tested by research yet. It springs from the writer’s intuition after considerable experience with and study of the problem.

LEARNING CENTERS IN ELEMENTARY SCHOOL MUSIC

Myra Lackey
Washington University

As early as 1800, Johann Heinrich Pestalozzi developed an educational principle which forbade treating one student the same as another and condemned any condition which sought to extract the same material from every individual in a particular classroom. He firmly believed that long explanations should be abandoned and that the vital ingredient of self-activity could set the mind into motion.1

Even though we think of “meeting individual needs” as a cliché in the present day educator’s vocabulary, it is not a completely new innovation. It is also seldom a comfortable one, because while we believe in individualization, overhead there looms that inevitable ominous cloud of doubt that in practical reality we can exercise that which we so firmly believe. This undertaking can become less threatening only if we stop referring to it as something to be done to students and begin regarding it as a way of thinking about learning and learners. It demands of us the best that we are and have to offer in terms of knowledge of content and method, organization, instructional strategies, and understanding of the nature and behavior of learners and the learning process.2

The whole-class approach to instruction is found to be inadequate for meeting individual differences and needs in the classroom. No single method can be considered the best method just as no method can be categorically labeled inappropriate. The following statements form a rationale for individualization.

1. There are many patterns of learning and no one method meets the varied needs of all children.

2. Learning is an active, not a passive, process and must involve participation in a task rather than mere absorption of information.

3. The teacher cannot tell a child how to think, but must provide him with the freedom, the encouragement, and the opportunity to do so.

4. Discovering and developing uniqueness in individuals is a major goal not to be thwarted by ignoring or minimizing differences.

5. Children bring to each new experience varying amounts of information and misinformation, which may clarify or distort concept formation.
6. The unstructured and inductive experiences which occur in a child’s life are often the most profound and influential activities of childhood.

7. Children learn from each other, through observation, imitation, and cooperative consideration of a mutually challenging task.

8. Intrinsic motivation makes children capable of meaningful self-selection and self-correction of appropriate learning activities.

This paper will be concerned with research into the learning center approach as a means of individualizing instruction for students, and the application of this concept to elementary music education.

A learning center is any place on earth (or elsewhere) where learning can abound! In terms of the school classroom, a learning center is merely a physical area where children engage in a variety of learning activities and experiences. As Jerome Brunner states, “The child learns best when he discovers basic concepts through his own exploration and experimentation and through manipulation of the tools of learning.” Learning centers should provide the environment necessary for this kind of conceptual learning to take place.

A good learning center atmosphere should provide for freedom of movement and freedom of individual study. A prime consideration is small and large study groups. The trend is to a comfortable environment: a carpeted, air-conditioned, well-lighted, living room setting, responsive to students, not just to the teacher. Thus the classroom is fast losing its traditional size, shape, and form. Instead of being a box-like room with parallel rows of desks, the “teaching station” is now a shapeless grid without boundaries. Students move freely from one area to another or sit around in small groups on the carpeted floor, with or without a teacher.

Schools are heading into the era of the “saturated environment.” Everywhere, but particularly in the elementary grades, children are being surrounded by multimedia, multi-sensory materials: things to see, hear, touch, taste, smell, and manipulate. “There should be so many materials around that kids stumble over them,” says Pino.

The trend in AV equipment is small, easy-to-operate, inexpensive units—tape cassettes using cartridges, for example, instead of bulky reel-to-reel tape recorders, and 8mm projectors as well as 16mm. The idea is to have enough equipment so that every child can have it when he wants it. Neatness and order inside the school house are out. Equipment and furniture get pushed around like toys, which they often are. An open classroom should be organized, but it is often messy because many things are happening in it. There are projects in progress everywhere. Students are allowed to experiment with objects and leave them about the room. They can decorate the walls, use the library, move things about, and generally live comfortably in the room.

“Very young children,” says Halzlip, “Colours, shapes, sizes, weights, texture, growth—these are lessons the student must learn from experience.” Many activities are going on simultaneously. It is not a silent place. Students talk to each other and the teacher as they move around from group to group.

The purpose of learning centers is to help children learn how to learn. Teachers believe that telling or directing is not teaching. The object is to help children learn individually. Therefore, each child begins his learning at that point where he ceased to have successful learning experiences. The realization of how he learns is more essential for a child’s self-achievement than the amount of what he learns. Each child progresses at his own rate on that material which he has deemed essential for his progress. He also helps select the method and means whereby he will learn that essential material. The role of the teacher is a relatively passive one. He is there as a resource person, advisor, and guidance counselor.

Every learner has a learning style. It is the objective of the teacher to discover the learning style of every student. This is accomplished by observing the behavior of the learner. Some students can be diagnosed faster than others. For some students an initial diagnosis may be incorrect. This may be determined by a personal conference with the student. If so, a new diagnosis can be formulated as a result of the conference. Once the learning style of the student is established, conditions can be set whereby this particular student will see the need for learning.

One of the key questions seems to be, “Why would a learner feel the need to use a learning center, and what would he do there?” There are at least four reasons why learners are in centers:

1. They are in the center on their free time, browsing to obtain information in which they are interested.
2. They are there to prepare an individual or small group report.
3. They are there to sample interest centers established as a result of needs expressed by teachers, students, or principals.
4. They are there as an integral part of courses of study in which they are engaged.

The student in this case is actually programmed by design into the center for information, learning skills, to foster an attitude, or all three.
It is a widely held myth that academic excellence is a result of rigid, authoritarian teach-and-curriculum-centered education. However, research comparing authoritarian versus self-directive teaching methods indicate that the latter is more effective, even using such conventional measuring sticks as grades, college achievement, and success on jobs.

The most impressive comparative study along these lines was done in the 1930's. Several foundations, notable the Carnegie Foundation, put up over four million dollars for a study which is known as the "Eight Year Study". The "Eight Year Study" took in thirty schools, ranging from luxurious private schools to small public schools. There was a special twenty-point outline for the kind of changes in curriculum and teaching methods that these schools agreed to make. Essentially the changes were in the direction of giving more authority and responsibility to the children and making curricula more flexible. In the most extreme schools, the teachers refused to teach altogether. They just stayed around as guards and facilitators for the children, answering their questions, helping them to find books in the library, etc., but refused to tell them what to study and would not give lectures. The fifteen hundred children in these thirty schools were tracked down through their four years of high school and through the subsequent four years of college--thus the name, Eight Year Study. Next, a survey was made of how they did when they moved into the grim world of dog eat dog, competition and individualism.

The final step was to compare these fifteen hundred children with fifteen hundred children from schools using conventional teaching methods. Each student was matched and paired for age, sex, social background, aptitude test scores, vocational and avocational interests, etc. The results were astounding. On every parameter, the children from the experimental schools were superior to those in teacher-and-curriculum-centered schools.

Advocates of learning centers in open-space classrooms mentioned the following items as advantages to this type of learning situation:

1. Children like to come to school. According to Goodek and Mathias, more youngsters are learning--pupils who wouldn't have made it under the old system are excelling in the new one.

2. Problem children don't have as many problems. Students do a lot of physical moving from one function to another. Also, in the ungraded situation, if a child isn't ready for Junior High in the normal number of years, he can comfortably stay in the school another year without the stigma of "funking".

3. Fewer discipline problems. Fewer discipline problems result from a freer atmosphere of work.

4. More parent involvement. Parents are encouraged to volunteer as teacher aides. Also, visitors may wander in and out without disturbing the students or teachers.

5. Pupils become more self-reliant. Children are learning more self-responsibility, self-discipline, independence, self-direction, and seem to be more mature than their peers in other learning situations.

Since open education stresses the total growth and development of the students, the arts play a central role. The open classroom might tend to enhance the aesthetics and lessen a dogmatic approach.

In open education, the music teacher cannot be traced by tracking the movements of the pupils through the halls. She is usually engaged in other activities. She may be working with children on a music performance, conferring with a classroom teacher on helping children make musical instruments for science, locating books for children's reports on subjects in music, or collaborating with the physical education teacher on a lesson in rhythms.

In applying the use of learning centers for the elementary music program, the following items should be considered.

A. Objectives: What should be taught?

1. What is the central purpose of the center?

2. What is the specific purpose for each level, activity, or content area?

B. Tools and Materials: What instructional equipment is needed?

C. Operational Procedures: How will the information be taught?

1. Introduction of center.

2. Directions for use.

3. Well-defined procedures for each activity.

D. Provision for Evaluation: What means will be used to evaluate results?

In the following paragraphs, one learning center for the elementary school music program will be explained in detail, and guidelines will be presented for several others.
Content Area: Music

Topic: Playing the autoharp.

A. Objectives.

1. Central Purpose: Children should be able to demonstrate their ability to play the autoharp as an accompanying instrument as they sing simple songs.

2. Specific Purpose:
   - Level 1—Child can demonstrate his understanding of the correct rhythm as he plays a simple one-chord song.
   - Level 2—Child can demonstrate his ability to play a simple two-chord song.
   - Level 3—Child can demonstrate his ability to play a three-chord song.

B. Tools and Materials.

Autoharp, case and table; choices of one, two, and three-chord songs with autoharp chord markings (separate cards for each song showing melodic line and chords marked F, C, G, etc.), and step-by-step instructions.

C. Operational Procedures.

Level 1

1. Place the autoharp on top of its case on a table which will serve as a resonating chamber. The long flat side should be next to the player. He should be able to read the letters on the bars if the autoharp is in the correct position.

2. Press the F button with the index finger of the left hand. Use the pick (felt or plastic) with the right hand, holding it between the thumb and index finger.

3. Still pressing firmly on the F button, the player may strum the strings making the motion go away from his body. He may strum on the left side of the chord bars by crossing the right hand over the left, or by strumming on the right side of the chord bars. Count slowly and evenly, 1-2-3-4, strumming the F chord as he says the : and the 3.

4. Strum the F chord evenly and sing, "Are You Sleeping".

5. Play and sing all the one-chord songs. If the pitch is too high or too low, try using the C chord or the G chord.

The learning center just presented could be carried further by continuing into songs requiring the use of more chords, playing each song in several different keys, and creating special effects on the autoharp. The sound of the bagpipe may be simulated by depressing the G chord and the G minor chord simultaneously. The sound of the guitar may be simulated by depressing a chord, plucking the lowest string and strumming the strings. By using their imaginations and experimentation, students can simulate other instruments such as the harp, balalaika, banjo, zither, etc.

In designing learning centers for the music program, the music teacher should include centers that fulfill the learning objectives of the overall goals of the music program. Therefore, other learning centers should provide musical experiences that each child needs in singing, rhythmic expression, intelligent listening, playing instruments, music reading, and opportunity for being creative.

The autoharp learning center previously described partially fulfilled several of the goals of the overall music program. It provided experience in singing, rhythmic expression, playing an instrument, and opportunity for being creative.

At least one center should be designed for experiences in listening since that is the core of every music program. Young children should learn how to discriminate the differences in sounds—sounds of nature, machines; the differences in the sound of a child compared to an adult. The same situation applies to discrimination in the sounds of instruments. This goal could be accomplished by designing a learning center where children make use of recordings such as Benjamin Britten's "Young Person's Guide to the Orchestra", Prokofiev's "Peter and the Wolf", etc.

Igor Stravinsky's "Suite No. 1 for Small Orchestra" could be used to help children discover ABA form. Other listening experiences could be designed to help children discover tone color, texture, melodic patterns, structure, etc.

To strengthen learning of music symbols and notation, a learning center could be established with card games, crossword puzzles, scale building games, flash cards, etc.

Still another center could feature materials and instructions for making instruments. This activity could be culminated by a musical hoedown.

Students in traditional elementary music classes are often frustrated by lack of reading skills. Making use of music learning centers should enhance their self-concept as they progress successfully at their own rate of speed.

The step from a traditional music program to an individualized program utilizing learning centers is a big one. In order to be successful, it would have to be preceded by thorough preparation by the teacher. The transition would take much patience, understanding, and enthusiasm.
(At this point, the following songs, with autoharp chord markings and the melodic line notated would be included on individual cards:
Row, Row, Row Your Boat
Kookaburra
O How Lovely is the Evening
Taps

Reuben and Rachel
Canoe Song
Shalom Chaverim
Above the Plain)

Level 2
1. Rest the index finger of the left hand on the button of the F bar. Now rest the middle finger of the left hand on the button of the C7 bar. Notice that it is the next one in that row. Seesaw back and forth by pressing one button after the other. Feel your way without looking.

2. Strum the strings with your right hand. Practice changing smoothly from the F chord to the C7 chord.

3. Play and sing the two-chord songs.

(At this point, the following two-chord songs would be included:
Clementine
Dona Nobis Pacem
Down In the Valley
Sandy Land
On Top of Old Smoky

Hey, Ho, Nobody Home
Sakura
Minka
Skip to My Lou
Joshua Fit the Battle)

Level 3
1. Rest the index finger of the left hand on the F bar, the middle finger on the C7 bar, and your third finger, left hand on the Bb bar. Press each finger firmly, one after the other, and feeling your way without looking.

2. Practice playing the three chords in sequence until the transition is made smoothly.

3. Play and sing all the three-chord songs.

(At this point, the following three-chord songs would be included:
Red River Valley
Home on the Range
Jacob's Ladder
Go Down, Moses
Comin' Round the Mountain
Billy Boy

When Johnny Comes Marching Home
Du Liegst Mir im Herzen
Poor, Wayfaring Stranger
The Saints Go Marching In
I'm On My Way
Spring Has Come)

D. Provision for Evaluation

Teacher may select at random songs from the lists for performance by the student.

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Every child is different and learns in different ways. The use of learning centers in elementary school music in the atmosphere of the open classroom is one way to stimulate these differences in an advantageous way.

FOOTNOTES


10. Gerlatti, Robert C., "What is a Media Center?", Audiovisual Instruction, XIV (September, 1969) p. 21.


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BIBLIOGRAPHY


Gerlattt, Robert C. "What Is a Media Center?" Audiovisual Instruction, XIV (September, 1969) p. 21.


A COMPARISON OF TWO METHODS FOR TEACHING MUSICAL FORM TO SEVENTH GRADE GENERAL MUSIC CLASSES

James William Burton

(This paper is based on the author's doctoral dissertation of the same name presented as partial fulfillment for the requirements of the D.M.A. degree at the University of Missouri in Kansas City, 1974).

The purpose of the study was to determine whether it is more effective to teach musical form in a seventh grade general music class by including or excluding student musical composition. A quasi-experimental design was used to compare Method "A" (in which musical composition is excluded) with Method "B" (which includes musical composition) to see in which method a greater comprehension of musical form takes place.

The following null hypothesis was formulated. There is no significant difference in the mean average scores on a cognitive test of musical form between persons who used Method "A" from those persons who used Method "B". The test of significance will be rejected at or beyond the .05 level.

Since comparison is the technique that may be used in conducting such an experiment, two equated groups for comparison purposes were found to exist in the Raytown South Junior High School. (Appendix A) Therefore, this school was selected as the site of the experiment.

Two seventh grade general music classes of Raytown South Junior High School, Raytown, Missouri, were used as the student population in the quasi-experimental design. There are three junior high schools located in Raytown, Missouri (population c. 37,000), which is a suburb of Kansas City, Missouri. Approximately 33 percent of the community earn under $10,000 per year; about 65 percent are in the $10,000-$24,999 income bracket; and about 2 percent earn over $25,000 per year. The school population of Raytown South Junior High School is composed predominately of students whose parents earn from $10,000-$24,999 per year.

Seventh grade General Music, along with Art, Speech, Spanish, and French, is an elective. The two classes scheduled to meet alternate days were divided into two heterogeneous groups of 34 and 39 students each, one being arbitrarily designated as the control group and the other as the experimental group. The combined population for the study was 77.

One class of the Raytown South Junior High School met during first hour (8:25-9:15). This class was selected arbitrarily as the control group. The control group originally had 39 students; however, due to the absences during the pretest and posttest, which required two class periods each, the control group finished the experiment with 31 complete sets of test scores.

The experimental group met during fifth period (12:55-1:45). This group originally had 38 students;
but due to the absences during the pretest and posttest, which required two class periods each, the experimental group finished with 35 complete sets of test scores.

THE PRETEST-POSTTEST

The pretest-posttest (see Appendix B) consists of three sections. Section I and II take about 20 minutes, while Section III takes about 45 minutes. Each section begins with instructions and is followed by two examples of the type of questions being used. Section I contains ten true or false questions concerning general cognitive facts about musical form; Section II has ten questions dealing with the visual recognition of musical form, and Section III contains ten questions in which each complete composition is performed three times and the student must aurally identify the correct form. (see Tape 1)

According to Tyler, the validity of any test should ask the question, "Just what is it that this test does measure?" One way to find a validity coefficient of a test is to compare the results of the test with the results of a similar test. Since the writer found no other test of similar design, this was not possible. Another alternative to find a validity coefficient is to have qualified judges judge the content validity of the test. Six qualified judges (see Appendix I) were asked to answer questions (see Appendix J) as to the validity of the pretest-posttest.

TABLE 1

<table>
<thead>
<tr>
<th>Question</th>
<th>Good</th>
<th>Average</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>100%</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>2</td>
<td>33%</td>
<td>67%</td>
<td>--</td>
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<tr>
<td>3</td>
<td>17%</td>
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<td>4</td>
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<tr>
<td>5</td>
<td>33%</td>
<td>67%</td>
<td>--</td>
</tr>
<tr>
<td>6</td>
<td>33%</td>
<td>67%</td>
<td>--</td>
</tr>
<tr>
<td>7</td>
<td>83%</td>
<td>17%</td>
<td>--</td>
</tr>
</tbody>
</table>

In judging the validity of the pretest-posttest (see Table 1, above): 1) All of the judges agreed that the instructions on the pretest-posttest were good.
2) The majority of the judges (67%) judged the lesson plans as average to the extent that they agreed with the test items. 3) Most of the judges (83%) believed that the test items were clearly worded. 4) Sixty-seven percent of the judges agreed that the true or false items were valid for measuring general knowledge of binary, ternary, and rondo form. 5) Most of the judges (67%) believed that items 1 through 20 were of average quality for measuring the visual recognition of binary, ternary, and rondo form. 6) Sixty-seven percent of the judges agreed that items 21 through 30 were of average quality for measuring aural recognition of binary, ternary, and rondo form. 7) Eighty-three percent of the judges rated the whole pretest-posttest to be valid for measuring cognitive knowledge of binary, ternary, and rondo form. On the basis of the judges' rating of the test as a whole, it was decided not to alter any items on the pretest-posttest.

The pretest was administered October 13, 15, and 16, 1973, to three seventh grade general music classes totaling 81 students in the Indian Creek Junior High School and the Broadmoor Junior High School of the Shawnee Mission Public School System, Shawnee, Kansas, to find out if there were any statistically weak questions. In order to do this, the number of correct responses were tabulated for each test item. If there had been too many correct responses to an item, that item would have been eliminated and another item would have been added to take its place. The pretest-posttest (Appendix B) was then administered to the two classes at Raytown South Junior High School.

A split-half reliability was determined by using the Pearson product-moment correlation formula with the Raytown South Junior High School control and experimental groups' pretest scores. Using the Spearman-Brown prophecy formula to estimate the reliability for a full length test, the reliability coefficient obtained was .70. A correlation coefficient of .70 is adequate for group measurement, but is of doubtful value in making individual predictions. Since prediction was not a concern, .70 was judged adequate for the purpose of this study.

DATA COLLECTION

Data collection began on November 5, 1973, and terminated on December 19, 1973. (see Appendix H) A total of sixteen class periods was allocated for the experiment.

Since classes were intact before the study was initiated, a quasi-experimental design with pre-observation, post-observation and equivalent groups was selected. The diagram is as follows:

$$\begin{align*}
\frac{O_1 \times O_2}{O_3 \times C_0} & \quad \text{gain} \quad \text{gain} \\
O_2 & = \frac{O_1}{O_3} \\
O_3 \times C & = 0_4 \\
\text{gains are compared} & \end{align*}$$

The purpose in using this design was to control most of the threats to the internal validity.

The experiment lasted only two months so history was not a problem. The administrations of the pretest and posttest for both groups were as similar as possible. Instrumentation was not a factor in this experiment because the pretest-posttest measures cognitive knowledge about musical form. The differences between the pretest and posttest scores were not due to statistical regression, since all subjects were of the same grade and age level. The subjects did not know whether they belonged to the
control group or the experimental group, thus eliminating selection bias and the Placebo-Hawthorne Effect. The element of mortality was removed by using only subjects with complete sets of pretest and posttest scores.

EXPERIMENTAL PROCEDURE

Prior to the study, the groundwork had been laid for the presentation of a unit on Musical Form. Both the control and experimental groups had the following list of units: Melody; Harmony; Rhythm; Dynamics; and Tone Color from Learning to Listen to Music by Reimer.10 The next unit, which the classroom teacher had planned to present, was a unit on Musical Form.

On November 5 and 7, 1973, before the unit on Musical Form was begun, the pretest was administered to both the control and experimental groups.

On November 9, 1973, the instruction began. Some of the listening parts of the lesson plans for both the control and experimental groups were from Learning to Listen to Music by Reimer; however, it was obvious that Learning to Listen to Music did not contain enough aural examples so additional lesson plans were devised following the same format.

Noted musical examples for the lesson plans were derived from Musical Growth in the Elementary School,11 Music Skills for Classroom Teachers,12 and Francis Clark Library for Piano Students.13

Following the pretest, the control group spent equal time on the aural and visual aspects of musical form during the next twelve class periods. No time was allotted for composition. There were three class periods spent on binary form; three class periods spent on ternary form; three class periods spent on rondo form; and three class periods spent on the review of these three forms.

The experimental group, following the pretest, spent six class periods studying the aural and visual aspects of binary, ternary, and rondo form and the other six class periods were spent composing and performing musical examples to demonstrate their ability to use binary, ternary, and rondo form. Some examples of binary, ternary, and rondo compositions were performed on the piano by the instructor as models (each student was given a copy of Appendix E). The students were told they could use any compositional techniques they wished; however, the form had to adhere to the form being studied. The students were allowed to compose either in class or as homework. The students were told at the outset of the experiment that the assignments would be included in their music grade; however, the assignment needed only to be completed: the quality or the aesthetic value of the composition was not important to the study. During the class, all of the group compositions and as many as of the individual compositions as time would allow were performed and recorded (See Tape 2).

Following the twelve period unit on Musical Form, the posttest was administered. The results and conclusions of the pretest and posttest scores will be presented later and the amount of gain or loss attained form the control and experimental groups will be analyzed, e.g., high score, low score, range, mean, and standard deviation.

METHODS OF INSTRUCTION

The control group used Method "A" which included lecture, record listening, score reading, singing, and rhythm activities. Appendix H shows the overall schedule for each period. Each class period contained three musical examples, e.g., two record listenings and one song, in the respective form being studied during that class period. A new vocal song either in binary or ternary form was taught in each class period for all of the classes of the control group. In periods 2, 3, and 8 students were given a piano score which illustrated the respective form being studied during that period. In periods 10, 11, and 12, each student was given a piano score in either binary or ternary form. Each student had a copy of the songs or piano scores being studied and was asked to diagram them visually, e.g., A B A. After diagraming the song or piano score, the students were then asked to identify the correct form. Appendix C contained the purposes, objectives, materials, modus operandi, and an evaluation for each of the class sessions of the control group.

The experimental group used Method "B" which consisted of lecture, record listening, score reading, singing, rhythmic activities, musical composition, and performance of the musical compositions. Appendix H shows the overall schedule for each period. Half of the class time was spent on the musical form while the other half of the class time was spent on composition and the performance of these compositions. Periods 1 and 2, 3 and 4, and 5 and 6 were the same presentations as the control group. Periods 3, 6, and 9 were spent on group musical compositions and their performance using binary, ternary, and rondo form respectively (See Appendix F and Tape 2). Individual musical compositions and their performance by the student composers constituted the make-up of the last three class periods for the experimental group (See Appendix F and Tape 2). The purposes, objectives, materials, modus operandi, and an evaluation for each of the experimental group's class sessions are contained in Appendix D.

COMPOSITIONAL TECHNIQUES

In this study the same avenues to composition were utilized as are currently being used by the Manhattanville Music Curriculum Program (MMCP).14 As recommended by the MMCP, the size of the group was limited to four or five students and a different group of students was formed after every composition was finished.15 Group
composition was used first because it was hoped that the interaction of the group would carry over into the individual compositions. There was no limitation on the techniques of composition. Some of the techniques suggested were:

- Use of rhythm instruments only
- One note melody.
- Two note melody.
- Three note melody.
- Four note melody.
- Pentatonic scale.
- Whole tone scale.
- Major scale.
- Minor scale.
- Chromatic or twelve tone scale.
- Use of already existing songs or parts of songs.
- Use of recorded materials. (See Appendix E)

There was no instruction given in composition; however, some of the examples given were models (Appendix E) were performed on the piano by the investigator. Student compositions were limited only in that they had to adhere to the form being studied. All of the students in the experimental group were required to compose and perform one composition in each of the following forms: binary, ternary, and rondo. (The student could compose an A section, B section, and C section, and use them for all three forms, if he so desired). Examples of both group and individual musical compositions can be found in Appendix F.

Aural examples of both group and individual musical compositions can be found on Tape 2.

RESULTS

The highest and lowest score, range, median, mean, and standard deviation for both the control and experimental groups along with the corresponding information for the Shawnee Mission pretest are presented in Table 2 below. Raw scores for both the control and experimental groups as well as for the Shawnee Mission pretest are located in Appendix G. The possible total score on the pretest-posttest is 30.

<table>
<thead>
<tr>
<th>TABLE 2</th>
<th>MEASURES OF CENTRAL TENDENCY</th>
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<tbody>
<tr>
<td>Control</td>
<td>Control</td>
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<tr>
<td>Pretest</td>
<td>Posttest</td>
</tr>
<tr>
<td>High Score</td>
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<tr>
<td>Low Score</td>
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<tr>
<td>Range</td>
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<tr>
<td>Median</td>
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<tr>
<td>Mean</td>
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<tr>
<td>S.D.</td>
<td>4.26</td>
</tr>
</tbody>
</table>

There were 31 subjects in the control group. The highest score on the pretest was 20 and the lowest score attained on the pretest was 2, which gives a range of 18. The median was 12 and the mean score was 11.32. The standard deviation for the pretest was 4.26. The highest posttest score was 25 and the lowest score on the posttest was 13, which gives a range of 12. The median for the posttest was 13. The mean score was 18.96. The standard deviation for the posttest was 2.99.

The total number of subjects in the experimental group was 35. The highest score on the pretest was 19 whereas the lowest score on the pretest was 5, thus giving a range of 14. The median was 12 and the mean score was 11.46 for the pretest. The standard deviation was 2.85. The highest score for the posttest was 25 and the lowest score was 11, giving a range of 14. The median score was 18 and the mean was 17.65. The standard deviation was 3.36.

The number of subjects in the Shawnee Mission pretest totaled 74. The highest score was 23 and the lowest score was 2, giving a range of 21. The median score was 11.50 and the mean score was 11.36. The standard deviation was 3.95.

The hypothesis tests, which were made on the data, consisted of two types:

Type "a": For a given test (pretest and posttest)

\[ H_0: \mu_E = \mu_C \]

Type "b": For a given group (experimental or control)

\[ H_0: \mu_{\text{pretest}} = \mu_{\text{posttest}} \]

Type "a" tests used a t-test for means of independent groups. Type "b" tests used a t-test for means of dependent groups.

<table>
<thead>
<tr>
<th>TABLE 3</th>
<th>COMPARISON OF MEAN SCORES</th>
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<tbody>
<tr>
<td></td>
<td>Pretest</td>
</tr>
<tr>
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</tr>
<tr>
<td>Raytown Experimental</td>
<td>11.48</td>
</tr>
<tr>
<td>Shawnee Mission</td>
<td>11.36</td>
</tr>
</tbody>
</table>

Mr. Gordon Smith, Principal of Raytown South Junior High School, certified that the control group and the experimental group were made up of similar, heterogeneous students. This was further substantiated by the mean of their pretest scores, 11.32 and 11.48 respectively (Table 3). In fact the mean score of the Shawnee Mission Schools on the pretest was about the same, 11.36 as compared to 11.32 and 11.48. The fact that the means of the scores were so close together indicated that the two groups knew about the same amount of material at the
beginning of the experiment.

On the posttest scores, the mean for the control group was 18.96 and the mean for the experimental group was 17.65. The difference between the two means is 1.31 in favor of the control group (Method ‘A’).

<table>
<thead>
<tr>
<th>TABLE 4</th>
<th>COMPARISON OF STANDARD DEVIATION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pretest</td>
</tr>
<tr>
<td>Raytown Control</td>
<td>4.26</td>
</tr>
<tr>
<td>Raystown Experimental</td>
<td>2.85</td>
</tr>
<tr>
<td>Shawnee Mission</td>
<td>3.35</td>
</tr>
</tbody>
</table>

The distribution of scores as shown by the standard deviation of the pretest was 4.26 for the control group and 2.85 for the experimental group (See Table 4). This would indicate that perhaps there might have been a greater heterogeneity in the control group than in the experimental group. However, for the purpose of this experiment, both groups were considered to be heterogeneously equated and that there was no initial significant difference between the two groups.

The standard deviation of the control group was 4.26 on the pretest and 2.99 on the posttest (See Table 4). This shows that the scores of the control group tended to be more homogeneous on the posttest than they were on the pretest. In other words, the scores in the posttest tended to be more clustered around the mean; they were not as dispersed as in the pretest.

The standard deviation for the pretest of the experimental group was 2.85; whereas the standard deviation for the posttest of the experimental group was 3.36 (Table 4). In the posttest of the experimental group, the standard deviation has in fact increased. Method ‘B’ resulted in a wider variance of scores on the posttest even though the means of the posttest of the control and experimental groups were about the same. This increase in standard deviation indicates that the scores in the posttest of the experimental group were more widely distributed around 17.65 than the scores in the pretest of the experimental group were distributed around 11.48 (Table 3).

<table>
<thead>
<tr>
<th>TABLE 5</th>
<th>COMPARISON OF T-TESTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value of t</td>
<td>Degrees of Freedom</td>
</tr>
<tr>
<td>Pretest and posttest control</td>
<td>t = 8.02</td>
</tr>
<tr>
<td>Pretest and posttest experimental</td>
<td>t = 8.16</td>
</tr>
<tr>
<td>Pretest of control and experimental</td>
<td>t = 0.18</td>
</tr>
<tr>
<td>Posttest of control and experimental</td>
<td>t = 1.72</td>
</tr>
</tbody>
</table>

The value of t = 8.02 in comparing the pretest and posttest scores of the control group and the value of t = 8.16 in comparing the experimental group’s pretest and posttest scores means that both groups showed a significant shift (pretest to posttest) in mean gain scores at the .01 level (Table 5). Both methods of teaching musical form to seventh graders achieved a significant change.

In subjecting the pretest scores of the control and the experimental groups to the t-test of significance,22 the result was 0.18 (Table 5). Thus there was no evidence of a significant difference between the control and the experimental group at the beginning of the experiment. In comparing the control and experimental groups’ posttest scores,23 a t = 1.72 was found. This t-value falls between the value needed for significance at the .10 level and the value needed for significance at the .05 level. Since the decision had been made to reject the null hypothesis at or beyond the .05 level, the null hypothesis was not rejected.

A sample correlation of .31 was obtained by submitting the posttest scores versus the pretest scores of the control group to the Pearson product-moment correlation coefficient formula.24 This fails to reject (at the .05 level) the null hypothesis that the population correlation between the pretest and posttest is zero; thus there seems to be no evidence of a strong correlation between a pretest score and a posttest score. This indicates that the subjects did not receive the subject matter in a standard way. In other words, the high scores on the pretest did not seem to stay high on the posttest and the low scores on the pretest did not seem to stay low on the posttest.

In the experimental group, again there is evidence of neither a strong positive nor a strong negative correlation between the pretest and the posttest scores. An r = .31 was obtained by subjecting the pretest-posttest scores of the experimental group to the Pearson Product-moment correlation coefficient formula.25 This was not significant at the .05 level. This makes it impossible to say that a low score on the pretest corresponds to a low score on the posttest or that a high
score on the pretest corresponds to a high score on the posttest. Like the subjects in the control group, they did not receive the subject matter in a standard way.

**SUMMARY**

There are several extraneous variables, namely, bias, class size, and selection bias, which might have had an influence on the test results. Some of these extraneous variables will be discussed since they may have altered the outcome of the study.

Bias is a possibility whenever the researcher teaches both the control and experimental groups. Subconsciously, he can show more eagerness in the experimental group than in the control group and subsequently alter the results of an experiment. The researcher tried, at least consciously, to treat both classes impartially.

Selection bias is also possible when using intact classes as the control and experimental groups. The researcher, unless he flips a coin, has reasons for choosing one class over the other for the experimental group.

Another variable, which might have had an influence upon the results of the experiment, was the utilization of the same test (pretest-posttest) for the experiment. Some students might have improved their scores simply by taking the same test for the second time. Likewise, some students might have had apprehension during the pretest which did not exist during the posttest.

The fact that the control group met during the first hour and the experimental group met during the fifth hour might have had a significant influence upon the results of this experiment. The writer feels that this discrepancy in time could vary as easily have been detrimental to the experimental group, since some students may tend to be more alert early in the morning than just after lunch.

These variables might have caused the control group to increase their cognitive knowledge than the experimental group. In order to include music composition, the experimental group had less exposure to aural and visual examples of musical form than did the control group. It may be that continued reinforcement of aural and visual examples of musical form is a more effective method than is the musical composition and performance of musical forms in promoting increased cognitive knowledge.

The high gains (pretest-posttest) for both the control and experimental groups prove that the test results were not affected completly by extraneous variables. However, the possibility of the existence of these extraneous variables cannot be overlooked and the amount of influence that they might have on the results of this experiment is indeterminable. In producing increased cognitive knowledge of musical form, it appeared that the control group in using Method "A" made slightly greater gains (pretest-posttest) than did the experi-

**CONCLUSIONS**

The results of the statistical analysis showed that based on the mean posttest scores there was no basis for the hypothesis that Method "B" (experimental group) was as effective as Method "A" (control group). The effect upon the individual subjects as shown in the standard deviation of the posttest scores of the experimental group was more varied. It is worth keeping in mind that: 1) some individuals clearly do better under one method than under the other--on the average there is not much difference; 2) this may also point to a difference between sex, previous musical training, and the hour of the class; 3) the length of time spent on the aural and visual recognition of musical form may affect the results; and 4) there may have been musical learning which was not measured by the criterion test. It may be that the items did not measure the kind of learning that could result from performance and compositional behaviors. Since the items in Section II and III were rated average by the judges, it may be at this point that the added benefit of performance and composition were not accurately evaluated. The test may have evaluated only the kind of behavior that results from aural and visual analysis and since the experimental group spent only half the amount of time in that type of instruction, they might be expected to achieve lower scores.

By way of the evidence presented, Method "B" may be better than Method "A" in the sense that the subjects can complete the material in half of the time and participate in musical composition. In other words, the teacher who uses Method "B" may be sacrificing
very little on the part of increased cognitive knowledge in order to add another variable, that of musical composition.

It appears that the educator is justified in spending equal time between aural and visual recognition and musical composition in teaching musical form to seventh graders in a general music class because there is no significant loss in the acquisition of cognitive knowledge of musical form in this method of teaching.

RECOMMENDATIONS

This study was conducted in a rather restricted socio-economic situation and involved relatively few subjects. It is recommended that a similar experiment be conducted encompassing a larger cross-section of the population as well as involving a substantially larger number of subjects; however, before a similar experiment is undertaken, a test should be developed which can measure the gain achieved in composition and performance. In such an experiment, the results would be more reliable and could possibly be generalized to a larger population.

It is also recommended that organized lesson plans be devised for classroom teachers similar to those found in Learning to Listen to Music. This writer organized a unit of lesson plans introducing binary, ternary, and rondo form; however, there are many more forms which could be used, i.e., sonata-allegro, theme and variations, free form, and symphonic poem. These units of lesson plans could be of value to a classroom teacher who may have five or six preparations daily and does not have the time to locate and organize material.

Some authorities believe that the time at which a class meets has an effect upon cognitive learning. The writer feels that this might have been a factor in this experiment since the control group met at 8:25 A.M., while the experimental group met at 12:55 P.M. It would be interesting to compare the results of gained cognitive knowledge between stationary classes and rotating classes.

It is recommended that other experiments be conducted to compare different methodologies in the teaching of music. The results of such studies could be of great importance to the teacher in the formulation of an effective method of teaching.

FOOTNOTES

1. Mr. Gordon Smith, Principal of Raytown South Junior High School, verified that the two seventh grade general music classes, which were selected for the experiment, were formed at random.


3. Mr. Gordon Smith gave, by phone, this statement as to the socio-economic status of the students of the school.


9. X experimental variable manipulated.
C control variable.
O observation or test.
--- a line between levels indicates equated groups.


15. Ibid., 23-24.

16. \( \mu \)
null hypothesis.

\( \mu _{E} \)
mean of the experimental population.

\( \mu _{t} \)
mean of the control population.

\( \mu _{pretest} \)
mean for population on pretest.

\( \mu _{posttest} \)
mean for population on posttest.


19. \( N_c \) The number of subjects in the control group.

\( N_e \) The number of subjects in the experimental group.


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**INSTRUCTION IN THE MUSIC CONSERVATORIES OF ST. LOUIS, 1870-1930**

*Erin Headley*  
Washington University

In works such as Ernst C. Krohn's *Missouri Music* and August Waldauer's article, "Music in St. Louis," great attention has been devoted to St. Louis composers, orchestras, choirs, opera productions, church music, and chamber groups. However, the history of musical instruction in St. Louis both in the public and private schools has not yet been sufficiently researched. This discussion will concentrate primarily on musical instruction available in the conservatories of St. Louis roughly between the years 1870 and 1930.

Immediately after the Civil War, conservatories of music began to appear in the United States. These institutions generally imitated the European conservatories in that a system of group instruction was adopted. Many of the founders were graduates of the great European conservatories and were probably exponents of that system of instruction.

In searching through Gould's *St. Louis Directory* for the years 1870 through 1930 this writer has discovered over 50 conservatory-type institutions and undoubtedly overlooked a few along the way. These schools are listed in Appendix A with founders' names when known, and their approximate years in operation.

The Beethoven Conservatory in St. Louis was the first established conservatory in the state of Missouri, according to a pamphlet issued by that school in approximately 1873. This school was founded by Edwin A. Williams in 1871 and bought in the following year by August Waldauer and Hermann Lawitzky. Waldauer, a violinist, conductor, and composer, was born in Landau, Germany, in 1826. He was active in St. Louis as conductor of the St. Louis Philharmonic Orchestra (1866-67) and a manager and leader of various other St. Louis orchestras. Unfortunately, no such detailed biographical information is available for Waldauer's partner, Lawitzky, or for the founder, Williams. In 1889 and 1900 Waldauer managed the conservatory with Marcus Isaac Epstein, an American pianist and composer and pupil of Carl Reinecke, Salomon Jadassohn, and Ernst F. Richter at Leipzig. From 1900 on, Epstein directed the conservatory with his brother Herman Isaac, who enjoyed an equally impressive musical training.

The Beethoven Conservatory was primarily based upon the European system of instruction in which a small class of pupils studied organ, piano, voice, violin, or other instruments. The Beethoven Conservatory (Pamphlet) of ca. 1873 emphasizes the superiority of class instruction over private instruction. The class situation developed self-confidence in playing habitually in the presence of others and it stimulated competition. If a student advanced himself further than the others, he was
placed in a class at a higher level. Private lessons were offered at the conservatory for exceptional students. Of the many other conservatories found in Gould's Directory only a few stood the test of years or could boast founders and faculty of the artistic merit of the Beethoven Conservatory. Among the largest were Conrath's Conservatory, Heinik Conservatory, Koerner School of Music, St. Louis Conservatory, Strasserger's Conservatory, and the Weltner Conservatory.

Although Conrath's Conservatory operated under that name only between approximately 1910 and 1915, it included two large schools with an artist faculty of 40. The founder, Louis Conrath, had a fine musical background, having studied at the Conservatories of Mayence and Leipzig in Germany. The Heink Conservatory enjoyed only a short period of operation, 1909-1915, but had as its founder Felix Heink, a composer and pianist from Germany who studied with Anton Rubenstein among others. Heink taught at New York Institute of Music and at the Chicago Conservatory of Music. Strasserger's Conservatory of Music, in existence almost as long as the Beethoven, was probably the largest and most significant in St. Louis. It had at one time three branches in various parts of the city and 51 faculty members in 1916. The founder, Clemens Strasserger, came from Germany in 1886 and established himself as a well-known trumpeter, educator, and conductor. The Krogler School of Music, the St. Louis Conservatory, and the Weltner Conservatory were also well-equipped with a fine faculty and administration. Unfortunately, information is available concerning the Weltner Conservatory's founder, Frank Weltner, in a St. Louis newspaper article of 1903, the Weltner was ranked as high as Conrath's, and Strasserger's Conservatories.

In general the curriculum of these schools included the study of instruments, music theory, and foreign languages. Some schools offered methods courses for prospective teachers. The only school catalogues available to this writer are those for Beethoven Conservatory, Conrath's, Heink, Krogler School of Music, and Strasserger's. Descriptions of courses in these catalogues are vague but nonetheless some picture of musical instruction can be gained from them. According to Strasserger's Catalogue of 1915-16, the instruments listed for class and private instruction are organ, piano, voice, violin, cello, and cornet, and all other orchestral instruments. All of the other main conservatories also offered a similar variety of instrumental instruction. Apparently piano students were not numbered among other students in these schools as can be seen in the programs of recitals of Strasserger's Conservatory. In discussing American conservatory instruction in 1925, Louis C. Elson in The History of American Music mentions that vocal work was almost always solo and instrumental study almost always for the piano. Most of the conservatories did not offer orchestral experience for young players. However, Strasserger's did have an orchestra of 10 students and faculty in the year in which it was formed, 1919. In 1924 the violin section consisted of 28 players, most of whom were students. However, the viola and 'celli section had one player each and the 'cellist was the faculty member, P.G. Anton. According to the Beethoven Conservatory (Pamphlet) of ca. 1873, orchestra playing was regularly practiced and taught at that institution.

In Strasserger's Conservatory of Music (Catalogue of 1915-16), counterpoint, composition, orchestration, history of music, and public school methods courses were offered. Conrath's Conservatory offered harmony, theory, form, and music history, and the Weltner offered basically that of Strasserger's but omitted the methods courses. Unfortunately no details concerning these courses are given. It is known, however, that Dr. Robert Goldbeck, Strasserger's theory teacher, defined composition as dealing mainly with form and analysis, and counterpoint with canon and fugue. Perhaps more light could be shed on these subjects if various textbooks from the late 19th and early 20th centuries were studied. Details concerning the typical music history course are enumerated in advertisements for the Krogler School of Music summer courses of 1905 and 1907. The earliest composer to be considered was Palestrina. The "Early Classical Period" includes Palestrina, Purcell, Bach, Handel, and Scarlatti; the "Late Classical Period," C.P.E. Bach, Haydn, Mozart, and Beethoven. Composers currently classified as "romantic" were organized into four categories. The fourth category included Wagner, Tchaikovsky, Dvorak, Strauss, and Elgar, and they were regarded as modern composers. Apparently the notion that music history was a process of growth and evolution was highly regarded. Goldbeck is a series of articles in the periodical, The Etude, views Mozart and Beethoven as mere predecessors of Mendelssohn and Schumann. The Heink Conservatory teachers apparently viewed music history in the same light. In the Heink Conservatory (Catalogue) of 1916, the course is described as follows:

The evolution of art is traced from its crude beginnings among primitive races to its full development as the greatest art of the 20th century.
Outside of the curriculum the conservatories offered many other musical opportunities. Pupils' recitals were numerous and usually included a large number of students and selections. Strasserberger's Conservatory presented 17 student recitals during the 1915-16 school year. Artists' recitals by students mentioned above, most recital programs were heavily numbered with piano selections and most infrequent were ensembles. Commencement recitals were given annually and graduating pupils who performed were usually assisted by a faculty group. In the Strasserberger's Graduation Exercices Program of June 4, 1897, 24 students performed, among other works, Mozart's Piano Concerto in D Minor, Beethoven's Piano Concerto in C Minor, and Weber's Piano Concerto in A Minor with the assistance of a small faculty string ensemble of five players. Artists' recitals by school faculty members were also offered. In 1894 Louis Conrat, piano, assisted by Louis Mayer, cello, and Mme. W. Runges-Jancke, voice, gave an artists' recital at Strasserberger's Conservatory. Three faculty recitals were given at Strasserberger's during the 1915-16 season. Lectures were another feature at some schools. During the 1898-99 season at Strasserberger's, Waldemar Malmene gave a series of lectures, two of which were entitled "American vs. European Conservatories" and "History of the Opera." Malmene was an eminent theorist who studied in Berlin, at the Paris Conservatory of Music, and at Cambridge. In 1872 one of his piano compositions won first prize in a competition held by the American Conservatory of Music, New York. In 1900 Ernst Kroeger gave a series of lectures at Strasserberger's entitled "How the Art of Music Came to Be Whatever It Was," "How to Listen to Music," and "On the Emotional and Picturesque." Kroeger, a native St. Louis pianist, organist, composer, and writer, studied mainly with such St. Louis teachers as Waldemar Malmene, Peter G. Anton, and Louis Mayer.

According to Edward Babin in his "Critique of "The Music Men and The Professors" by Charles E. Sollinger," many instrumental teachers desired to sell instruction books along with their music. Several publications were issued by various conservatories and instructors. Strasserberger's Publishing Company published piano methods used at the school, and Charles Kunkel and Ernst Kroeger issued harmony lessons by correspondence which contained the necessary steps for the student to eventually become an independent composer. Robert Goldbeck published his "Graduating Courses for Piano" in Goldbeck's Musical Instructor and in Goldbeck's Musical Art. These articles must have been a valuable pedagogical source for students outside the conservatory. Some problems arise in discussing the degrees offered by the St. Louis conservatories and the levels and ages of students enrolled. Strasserberger's offered in its "Professional Department" four types of diplomas for instrumentalists or prospective teachers. The first degree was for the teacher; harmony was a requirement. The second degree was awarded to the post-graduate, and counterpoint and composition were required. The third degree was the "Artists" diploma. Beyond this was the Master of Music degree given after the candidate had earned a series of examinations in harmony, counterpoint, composition, orchestration, sight-reading, and piano proficiency. Information from the Heintz catalogue is similarly vague since no mention is made of the age of the students or prerequisites qualifying them to enter the school. Perhaps high school students planning professional music careers attended these conservatories since the necessary musical instruction was not available in the public schools. For some, the conservatory education may have replaced the high school education. The Kroeger School of Music granted an out-of-state student an artist's diploma at the age of 16. Other schools such as the Welter and Strasserberger's advertised boarding for students near the school. Credit was not being offered in the high schools for students participating in music; therefore, the promising young performer probably neglected his musical studies or sacrificed his high school education.

The conservatories served a great need in the city for students requiring a thorough musical education. However, there existed some problems regarding standardization of courses; these are discussed by Alexander Henneman in his article, "Why Music Education Should Be Standardized by Conservatories." Apparently there was a system of accreditation at the beginning of the 20th century. In discussing the first decade of the 20th century, John Cotter in his thesis, "The Negro in Music in St. Louis," mentions that schools such as the Kroeger, Hugo, and Kunkel Schools of Music were recognized. This suggests that there was a system of accreditation although this writer has not yet found any information on such a system.

Much more research needs to be done on the subject of musical instruction in St. Louis and in other American cities. In the last 15 to 20 years some research on the musical instruction of African-Americans has appeared in dissertations and in journals, but prior to that little interest was taken. The four sources listed in Appendix B were recently brought to light by this writer. They will hopefully be utilized and others uncovered by scholars interested in early American and St. Louis musical instruction.

From what information is already available, it is evident that conservatories were numerous in St. Louis between 1870 and 1930 and that the few larger and more significant ones offered a variety of musical instruction. In fact, the experiences for the student were much richer with the existence of many schools.

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6. A copy of this pamphlet is in Gaylord Library at Washington University in St. Louis.


9. Ibid., p. 108.


11. From an advertisement in Musicians' Directory for St. Louis, Mo. and Vicinity, 1911-1913 Seasons (St. Louis: Val Rei's Piano and Music Co.), p. 43.


13. Ibid., p. 112.


15. Strassberger's Conservatory Scrapbook, Missouri Historical Society, St. Louis.

16. Ibid.


18. For example, in Strassberger's Conservatory of Music and Expression [Catalogue] (St. Louis, n.d. but dated as after 191 by this writer), methods courses were offered.

19. Strassberger's Scrapbook.


21. Strassberger's Conservatory of Music and Expression [Catalogue].

22. Strassberger's Recital Programs of April 27 and 29, 1924 in Gaylord Library, Washington University.

23. Strassberger's Conservatory of Music and Expression [Catalogue].


25. A number of these are to be found in the Krohn Collection, Gaylord Library, Washington University. Such topics as form and analysis, thoroughbass methods, counterpoint, harmony, and music history are discussed.

26. This advertisement is located in the Ernst Kroeger Scrapbook at the Missouri Historical Society, St. Louis.

27. "Analysis of a Composition and Other Aids to the Interpretation of Piano Music," The Etude (St. Louis, Feb., 1904).


29. Ibid., p. 28.

30. A copy of Waldo Selden Pratt's Class Notes in Music History: General Course (New York: G. Schirmer, 1908) is available in the Krohn Collection.

31. Strassberger's Conservatory of Music [Catalogue, 1915-16].

32. Strassberger's Scrapbook.

33. Ibid.

34. Ibid.


36. Ibid., p. 118.

37. Ibid.

38. Ibid., p. 115.


42. Ibid., April, 1883.


44. Strassberger's [Catalogue of 1908].

45. Kroeger Scrapbook, Missouri Historical Society.

Appendix A

The Saint Louis Conservatories of Music, 1870-1930

Each school is listed in alphabetical order with the founder's name when known, below the name of the school. The dates to the right refer to approximate years of the school's existence according to entries in Gould's St. Louis Directory. A date followed by a hyphen signifies that the school is listed in Gould's through 1930. 1930, however, is not necessarily the cut-off date for the school's existence. Information from sources other than Gould's is in some cases included and the source is enclosed in parentheses.

American School of Music
Mrs. E.J. Widen 1901

Becker Brothers Conservatory of Music
Lucien E. Becker 1906-1910
Also called "Becker College of Music."
Rene L. Becker, director (Musicians' Directory for St. Louis, Mo. and Vicinity, 1911-1913, p. 10).

Beethoven Conservatory of Music
Edwin A. Williams 1872-
Also directed by Lawitzky and Waldauer, and later, the Epstein Brothers.

Boeddecker Conservatory of Music
Emily Boeddecker 1900-

Boston School of Music
1902

Columbia Conservatory of Music
Also called "Columbian Conservatory of Music."
1909

Conrath's Conservatory
Louis Conrath
See "Ehling and Conrath College of Music" below.
1910-1915

Dallmer School of Music
Tabitha B. Dallmer 1913

Ehling and Conrath College of Music
Victor Ehling and Louis Conrath
Also called "Ehling College of Music" and simply "College of Music."
1896-1899-1917

Fallert School of Music
Mrs. Emma Wilkins Gutmann (Krohn, Missouri Music, p. 111). Also called "Fallert Studios." 1920

Forest Park College of Music
Ernst R. Kroeger (Official Program of the Missouri State Music Teachers' Association 5th Annual Convention, 1900, p. 28.)

Frederick Fischer College of Music 1902-1903

Geisser Conservatory of Music (Musicians' Directory, p. 28)
Also called "Carl A. Geisser Piano School of Music." 1902-1913

Goldbeck's Conservatory of Music (Krohn, Missouri Music, in biography of Madame W. Range Jancke, p. 113)
Also called "Goldbeck College of Music" (Music World, 1901, May, 9).

Haendel Conservatory of Music
Mrs. F. Kleinschmidt 1912

Heink Conservatory
Felix Heink 1918-1924
Probably established in 1916 (Krohn, Missouri Music, in biography of Heink, p. 112).

Henneman College of Music
Alexander Henneman 1908-1915
Also called "Henneman Vocal Studio and Hall." 1899

Henniger Conservatory of Music
1911-

Hughey School of Music Culture
1901-1912

Hugo School of Music
1919-1930

International Conservatory of Music
1906-1914

Kleinschmidt Conservatory of Music
Oliver Kleinschmidt (Musicians' Directory, p. 31)

Kroeger School of Music
Ernst Kroeger 1905-

Krohn School of Music
Ernst Krohn 1911-1914

Kunkel College of Music
Also called "Kunkel Conservatory of Music." 1900-1906
1919-1922

Laclede School of Music and Dramatic Arts 1898-
Luca Conservatory of Music
Founded in 1886 by a group of Negro musicans and patrons of music (Cotier, "The Negro in Music in St. Louis," p. 131).

McCreery School of Violin and Piano
1910-1913

Mendelssohn Conservatory
1909

Messmer School of Music
Ida Messmer
1908-1911

Missouri Conservatory of Music
J.C. Eisenberg
1910-1915

Morton School of Music
1909

Pettingill School of Music
Alice Pettingill
1907-1916

Putnam Conservatory of Music
Joseph Putnam
1908-1911

Carl Richter Academy of Music
1887-1888

Rinaldo's Conservatory
Eugene Rinaldo
1905-1921

St. Louis College of Music
Founded by Robert Goldbeck ca. 1880 (Krohn, Missouri Music, in biography of Robert Goldbeck, p. 110).

St. Louis Conservatory of Music
Thomas Moore
1886-1920

St. Louis Conservatory of Vocal Music
Robert Nelson
1893-1894

St. Louis Institute of Music
Originally named "Progressive Series Teachers' College." Founded by R.S. Blake, Sr. in 1912. The name "St. Louis Institute of Music" was adopted in 1937 (Archives of the Art Publication Society, St. Louis).

St. Louis Institute of Musical Art
1910-

St. Louis Musical College
S.B. Whitely
1889

Sacks' School of Music
Nathan Sacks
1910-1920

Schricker College of Music
1910-1929

Schubert Conservatory of Music
1924-1930

Strasserberger's Conservatory of Music
Clemens Strasserberger
1894-1924

Vienna Conservatory of Music
Robert Klute
1896-1905

Wegman School of Music
1916-1922

Wenner's Conservatory of Music
1908-1909

Weitner Conservatory
Frank Weitner
Established in 1897 (Official Program of the Missouri State Music Teachers' Association 16th Annual Convention, 1911, n.p.).

Appendix B
Further Sources


CONTEMPORARY CONCEPTS
OF CAREER EDUCATION IN MUSIC
AND THEIR RELATIONSHIP TO JOHN DEWEY

Melba S. Milak
Washington University

JOHN DEWEY AND HIS PHILOSOPHY OF EDUCATION

The philosophy of education in a democratic society
must be concerned with an application of ideas, aims,
and methods to further the democratic society. John
Dewey was a philosopher and a philosopher in education
in this society in the late nineteenth and twentieth centuries. His life (1859-1952) spanned a period of much
change in American history, and his views reflect some
of the changes and attempt to grapple with the problems
of this changing society.

One of his works, the book, Democracy and Education;
An Introduction to the Philosophy of Education, is con-
cerned not only with his philosophy of education, but also
his philosophy in general. By looking at his philosophy
of education in this book, it is possible to understand
much of Dewey's thought. He once observed that this was
the book in which his philosophy was most fully expounded,
and one added that critics of his philosophy refused to
read it.

According to Dewey in Democracy and Education, life
in the biological sense, is a process of self-renewal.
In the higher life forms, self-renewal ends in the death
of an individual, but the life process itself remains
continuous. Even though an individual may die, the life
process of the individual's group continues.

...Life is a self-renewing process through action on
the environment.

In all the higher forms, this process cannot be kept up
indefinitely. After a while they succumb, they die.
The creature is not equal to the task of indefinite
self-renewal. But continuity of the life process is
not dependent upon the prolongation of the existence of
any one individual.

And, according to Dewey, life in the social sense,
is the same continuity of the life-renewal process based
on experience.

With the renewal of physical existence goes, in the case
of human beings, the re-creation of beliefs, ideals, hopes,
and practices. The continuity of any experience, through renewing of a social group, is a liter-
al fact. Education, in its broadest sense, is the
means of this social continuity of life.

Just as food is necessary to maintain the biological
life of an individual, education is necessary to maintain
the social life of an individual.

Beings who are born not only unaware of, but quite
indifferent to, the aims and habits of the social
group have to be rendered cognizant of them and
actively interested. Education and education
alone, spans the gap.

Therefore, education is essential to maintain the
continuity of the social life of an individual and also
to maintain the social life of the group. Dewey has
discussed social life as synonymous with communication.

Not only is social life identical with communication,
but all communication (and hence all genuine social
life) is educative. To be a recipient of communica-
tion is to have an enlarged and changed experience.

The communication, or the educative process, differs
according to the group or the society in which it takes
place. The communication which takes place in a primitiv-
tive tribe when the older members of the tribe demonstrate
the experience of hunting to younger members of the tribe
is very different from the kind of communication which
takes place in a more advanced and complex society.

As societies become more complex in structure and
resources, the need of formal or intentional teach-
ing and learning increases.

To fulfill the need for the kind of communication
or educative process in a more advanced society, formal-
ized institutions have been established. Dewey was directly involved with one of these formalized institutions from 1894-1904, when he was at
the University of Chicago as Chairman of the combined
Departments of Philosophy, Psychology, and Education.
At the same time, he was the founder and director of the
University Laboratory School. While he was there, he
developed a comprehensive plan for the study and improve-
ment of education. However, this plan was barely under
way when he left the University, and some of his plans
were not fully implemented. Arthur G. Wirth, in the
Preface to his book, John Dewey as Educator: His Design
for Work in Education, has discussed the result of this
unrealized plan.

His over-all design is an indispensable source for
understanding his specific ideas, then or later, in
their proper intent. The failure to maintain this
perspective by some of Dewey's followers in the pro-
gressive education movement, as well as by his critics,
has led to unfortunate misunderstandings.

There have been many misunderstandings about Dewey.
One of the reasons for misinterpretation of his works
is the extremely complex style of his writing. Wirth
has discussed Dewey and the controversy surrounding him.
John Dewey has been the most controversial figure in twentieth-century American education. At the turn of the century, he was a leader in the criticism of traditional schooling. Sixty years later, educational ideas associated with him were under heavy attack. He has suffered from uncritical adulation as well as unwarranted vituperation. In recent years, it become the mode in the popular press to identify progressive education with loose, superficial educational practice and to label Dewey as its author.

Again, in Education in the Technological Society, The Vocational-Liberal Studies Controversy in the Early Twentieth Century, Wirth has urged the need for understanding Dewey's thought in relation to social complexities.

Dewey's educational thought cannot be understood apart from his assessment of the social situation and the philosophical issues of the time. Efforts to provide simplified interpretations for hardworking educators have resulted in reducing his ideas to feeble cliches. Dewey himself pointed to the contextual quality of his thinking about education in his Preface to Democracy and Education.

"The philosophy stated in this book connects the growth of democracy with the development of the experimental method in the sciences, evolutionary ideas in the biological sciences, and the industrial reorganization, and is concerned to point out the changes in subject matter and methods of education indicated by these developments."

Another problem encountered in understanding the complexities of Deweyan thought is the difficulty to be able to comprehend fully Dewey's battle against dualisms. Wirth has commented about Dewey's dualisms in relation to the contextual problem.

One way to grapple with the contextual quality of Dewey's work is to examine themes which cut across various facets of his thought. One such theme is his lifelong battle against dualisms. He thought contemporary life was shot through with dualities: America's religious heritage had set man apart from nature and put a Puritan conscience into conflict with man's sensual needs; psychology had divorced mind from body and separated the feeling of expressive self from the intellect; art was divorced from daily life and relegated to museums; school learning was disconnected from experiences outside the school door; work as sharply distinguished from leisure as virtue was from sin.

Dewey had first been confronted with this philosophical problem of dualisms while he was a student at the University of Vermont. The conflict between what he had learned in the environment of a small town in Massachusetts during his college years led him to be ever battling dualisms in his thoughts. Wirth has said:

He was confronted with a philosophical problem that preoccupied him for a lifetime: how to resolve the conflict that seemed to separate the material and moral science. At Vermont this issue was represented in the gap between the organic, evolutionary view of Huxley and the dominating philosophy on campus, which Dewey described as 'Scottish intuitionism.' Dewey came to see this dualism as typical of New England dualist heritage that he felt a need to oppose for the rest of his life. The depth of his feeling was revealed years later when he described this tradition as representing "divisions by way of isolation of self from the world, of soul from body, of nature from God" that were felt in him as "an inward laceration."

The preceding section of this study has been a brief introduction to Dewey's philosophy of education. In this introduction, this author has discussed Dewey with regard to the controversy which surrounds his thought. One of the reasons for the controversy is the extreme complexity of his thought which is reflected in his writings. Another aspect of Dewey's thought which is difficult to understand and interpret is his battle and interpretation of dualisms. This introduction is not intended to be a full resume of the Deweyan thought, but it is intended to provide a basis upon which to begin the discussion of the vocational-liberal studies issue in the next section of this study.

THE VOCATIONAL-LIBERAL STUDIES ISSUE

Wirth has advocated a more rational appraisal of Dewey's educational contributions to this society in John Dewey as Educator.

There is voluminous literature on Dewey's educational philosophy, but few efforts have been made to weigh his ideas against the practice he sponsored when an educator. After a period of unusually raucous commentary in the 1950's and early 1960's, we may be ready to seek a more rational appraisal of John Dewey's contributions to American education.

It is the intention of this author to seek a more rational appraisal of John Dewey in regard to a particular aspect of his thought. This aspect, the vocational-liberal studies issue is the one with which Wirth has dealt in his book, Education in the Technological Society.

There is a need to re-appraise and re-evaluate Dewey's thought about vocational education with regard to career education in the 1970's. Because of the re-
cent trends in career education by educators and Dewey's work in vocational education at the beginning of the century. There have been attempts by some educators to justify career education by merely quoting randomly from Dewey's writings.

Before confusion and new controversy can arise, this author feels the importance of examining Dewey's thoughts about vocational education and the application to the 1970's concept of career education. The purpose of the study is a reappraisal of the vocational-liberal studies issue and the next section, "Career Education" is its application to present trends in career education. In addition, this author will make specific applications in the field of music education in subsequent sections of this study—"Music Education" and "Study-Units."

At the beginning of the twentieth century, the American society was undergoing a drastic change from being one of rural communities to becoming an urban society. There was much discontent caused by the change. The rise of industry and technology caused many problems with which society had never been faced before. There were numerous labor problems; there were many immigrant problems; there was a major problem in the change of life-style for persons coming from rural backgrounds to be able to cope with urban life. Growing out of this discontent, there was, of course, a cry for educational reform. Wirth has discussed this cry for reform.

It is not strange to find that many groups were demanding changes in the schools as we entered the twentieth century. We had to find out if persons and institutions could cope with the realities of an emerging urban-technological-corporate society.

One of the most dramatic movements for school reform, as an alternative to the literary-classical tradition, was the vocational or industrial education movement.13

John Dewey was living and working at this time of great transition, and he was concerned with the changing society. In 1904, Dewey joined the Department of Philosophy at Columbia University. He became one of the leaders of the critics of traditional liberal school practice. According to Wirth:

As he saw it, the industrial education movement contained possibilities for educational reform that might make all schooling more relevant to twentieth-century realities and might help this country realize its democratic promises. He was a critic, however, of the narrow utilitarianism of most vocational educators...

...Unfortunately, for those who hunger for simple answers, Dewey's analysis of the problem was extremely complex.14

Unfortunately for Dewey, because of his complex analysis, his views about vocational education have been misinterpreted and often misunderstood. Two of his contemporaries, David Snedden and Charles Prosser, also were concerned with vocational education.

Because of the new age of technology, Dewey and his contemporaries thought that one of the ways to meet the need for educational reform was to be vocational programs. There was agreement that the traditional means of education, which was generally referred to as a "liberal" education, was basically a college preparatory program which was not adequate to prepare students for the new industrial workingman's society. There was no agreement, however, in the plans and ideas set forth about an alternative kind of education. The alternative kind of education was generally referred to as vocational training, but there was confusion as to the meaning of vocational education, and this lack of acceptance of a precise definition made it difficult to establish methods or curricula or to implement any new programs in education.

This author will present briefly the ideas of Snedden and Prosser to show the differences between the Snedden/Prosser view and Dewey's thought. The Snedden/Prosser view basically regarded vocational education as job training for employment, and Deweyan thought regarded vocational education as a much more complex kind of education.

Snedden, who had been a student of Dewey's at Columbia University, became one of the Chief School Officers in the United States in 1909. By this time, his doctrine of social efficiency was firmly established.

The doctrine of social efficiency contained an image of man, a vision of the good society, and a set of related recommendations for school practice.

Fortunately, argued Snedden, human beings fell into ability levels which paralleled the hierarchical work requirements of modern society. With the aid of new social science instruments, people could be identified and channeled into training that would benefit society and fulfill the individual.15

Prosser, a student and colleague of Snedden, had views about vocational education which were even more rigidly defined than Snedden's. He was able to further his views when he became the Executive Secretary of the National Society for the Promotion of Industrial Education. According to Prosser as reported by Wirth:

Vocational education was, in brief, "training for useful employment."

...Prosser insisted that all of vocational content must be specific and that its source was to be found "in the experience of those who have mastered the occupation."16
In contrast to the thoughts of Snedden and Prosser, Dewey proposed that vocational education should involve more than job training. His chapter "Vocational Aspects of Education in Democracy and Education" stated his thoughts about vocational education. He has discussed at length the terms "occupation", "calling", and "vocation," but his broad definition of occupation "is a continuous activity having a purpose."17 This study will adopt Dewey's definition of "occupation" for its purposes and will also adopt an interpretation of the term by Wirth, who has effectively summarized Dewey's thought in reference to the definition of "occupation."

In this sense it [an occupation] is something which occupies an individual personally; it is something in which he is interested and to which he is committed. Each individual in this sense, has a variety of "occupations", "callings", or "vocations". He may earn his living as a garment worker or an engineer. But he also may be a member of a family, may be active in community affairs and in political organizations, or may be passionately committed to playing the oboe.18

Wirth has continued by saying:

Dewey employed a kind of accordion usage of the term "occupation." In a constricted sense, Dewey used it to refer to specific jobs and concomitant training programs; more broadly, he used it to point to fundamental changes in the nature of work effected by science and technology. Beyond paid employment, he used "occupation" to apply to activities where one's deepest personal purposes or interests were involved; and at its fullest extension he [Dewey] in Democracy and Education said, "the dominant vocation of all human beings at all times is living—intellectual and moral growth."19

It is no wonder that there was puzzlement about the meaning of Dewey's statement that the key to educational reform lay in the use of "various forms of occupations" and their intellectual and moral content.20

The vocational education movement generally refers to the period 1910-1917. As shown by the differing opinions and thoughts between some of the leading proponents of education, the concern of educators about vocational education as a reform movement did not immediately provide a solution for the problem. However, the passing of a vocational education bill in 1917, the Smith-Hughes Act, at least gave some direction to vocational education. It was, however, worked out with Prosser as one of the major figures, and, of course, reflected much of his thought about vocational education; the Act did not reflect much of Dewey's thought. In addition, Prosser was named as Executive Director of the Federal Board for Vocation Education and was able to carry out many of the policies which he had helped to write into the bill.

Because of the enactment of the Smith-Hughes Act, and its support by Prosser, and because of the complexity of the views on "occupations" of Dewey, Dewey's thought fell into disuse.

After 1917, vocational education became more firmly established. In the early 1960's, there was a renewed cry for educational reform after the Russian launching of "Sputnik." The Smith-Hughes Act was revised and the revisions were passed in 1963. Wirth has remarked on the differences and the departure from many of Prosser's ideas. This revision, in departing from Prosser, included many ideas which are reflective of Deweyan thought. Wirth has quoted from a Senate subcommittee:

Several of the basic "Operational Principles" of the revision of the sixties illustrate dramatically the departure from Prosser's preferences...

Vocational education cannot be meaningfully limited to the skills necessary for a particular occupation. It is more appropriately defined as all of those aspects of educational experience which help a person to discover his talents, to relate them to the world of work, to choose an occupation...

The objectives of vocational education should be the development of the individual, not the needs of the labor market...21

In the 1970's there has again been a cry for educational reform. The public has been frightened by the unrest of the 1960's: the assassinations of prominent civil leaders, and the burning of ROTC buildings on college campuses and stores in downtown areas; it has become trapped by the problems of the early 1970's: a troubled economy, a world energy crisis, and pollution; the public is again looking to the schools for solutions.

Many new programs have been started; one of these programs is career education. The next section of this study will define and discuss career education in the 1970's.

CAREER EDUCATION

Because of the impetus given to educational reform, many new programs have been formulated. Among them are alternative schooling, work-study experiences, and "open" education. Another new program is career education; however, a universally accepted definition of career education has not been adopted by professional educators.

In 1971, a national invitational conference was held at North Carolina State University by the Center for Occupational Education. This conference was reported in
Career Education and the Elementary Teacher, a book by Hoyt, Pinson, Laramore, and Mangum. No official definition was adopted at the conference. This book further reports that the U.S. Office of Education has not adopted an official definition.

The U.S. Office of Education has chosen so far to avoid any official definition of career education. Instead, USOE policy has consistently stated that career education will in the long run be defined in a grass-roots debate that hopefully will take place throughout the nation.22

The "grass-roots debate" idea appears to be one which will allow educators free rein in which to develop methods; however, the problems inherent in a case such as this are reminiscent of the problem of definition encountered by Dewey and his contemporaries during the vocational-liberal issue of 1910-1917. Without any concrete definition with which to be guided in the formulation of methods or programs, every agency, every committee, every school, and each individual teacher must first grapple with the problem and the definition of career education before beginning to work with it. Not only does such an hazy conception lead to confusion, but it also leads to inefficient implementation of programs which have already been developed.

For the purpose of this study, the author has reviewed some of the current definitions of career education.

In the book, Career Education and the Elementary School Teacher, the authors have adopted this definition:

Career education is...the total effort of public education and the community aimed at helping all individuals to become familiar with the values of a work-oriented society, to integrate these values into their personal value systems, and to implement these values into their lives in such a way that work becomes possible, meaningful, and satisfying to each individual.23

Another definition of career development appears in the "To the Teacher" section of the curriculum guide for the educational television services program, "Bread and Butterflies," which was developed by a consortium of thirty-four education and broadcasting agencies, including state departments of education, ETV networks, ETV commissions, and local educational agencies. The definition is:

"Bread and Butterflies" is more than a television series. It is an instructional package for career development. The programs and curriculum materials are designed to help nine-to-twelve-year-olds explore the relationship between their lives and the world of work. But "Bread and Butterflies" is not merely learning about work, or uncovering personal feelings about career roles, or doing work-related tasks; it is a combination of all three. It pulls together all the facets of personal and career development that help young people understand who they are and what they can become.24

Many states have adopted some kind of plan for furthering career education. Missouri is one of these states. In the publication, "Missouri Schools," career awareness is defined by Dr. Frank Drake, who is the coordinator of Career Education for the Missouri State Department of Elementary and Secondary Education. Susan Marie Pevey quotes Drake in an article "Awareness Is The Beginning Step."

The basic goal of career awareness is to bring to children's attention the world of work and the options available to them at an earlier age...

Career awareness means making youngsters aware of the vast diversity of occupational groups and different jobs within these clusters. The goal is to create in the child, not only an awareness of the world of work, but his place in the world.

This involves making the child aware of his personality and how it relates to his life...25

The preceding definitions have been chosen to show that career education in the 1970's is concerned with the individual. It is a view that is reflective of Deweyan thought, and it is far from the Snedden/Prosser view, vocational education as job training. For the purpose of this study, the author has adopted a definition of career education based on Dewey's thought about "occupation" and the interpretation of Dewey's thought by Wirth, as it was discussed previously in this study. Therefore, the objective of career education for each individual would have a two-fold purpose. The first of these would be an awareness of an occupation as a job or a career. The second would be an awareness of a "being-occupied-with" an activity as a career or as a leisure activity.

In the next section of this study, the author will apply the two-fold objective of career education to music education.

MUSIC EDUCATION

In discussing the humanities, one of Dewey's concerns was the dualisms with which the arts were regarded. He believed that creativity was the culmination of the scientific process. According to Dewey, it could take place in the arts as well as in science.
It is suggestive that among the Greeks, till the rise of conscious philosophy, the same work, was used for art and science. Plato gave his account of knowledge on the basis of an analysis of the knowledge of cobblers, carpenters, players of musical instruments... pointing out that their art...involved an end, mastery of material, control of appliances, and a definite order of procedure—all of which had to be known in order that there be intelligent skill or art.26

This study has previously cited one of Dewey's examples of the dualism of "art being divorced from daily life and relegated to museums." He re-emphasizes the point while discussing the renewal of individuality.

I can think of nothing more childishly futile, for example, than the attempt to bring "art" and aesthetic enjoyment externally to the multitude who work in the ugliest surroundings and who leave their ugly factories only to go through depressing streets to eat, sleep, and carry on their domestic operations in grimy, sickly homes.27

In order to relate the arts in a specialized area—music—to Deweyan thought, this author has chosen to quote Dewey as he discussed the school in terms of occupations and of its being an ally of the arts.

The occupations can transform the whole spirit of a school. They create opportunities for children to feel a sense of personal involvement, to engage in manipulative and expressive as well as mental activities, and to grow in social insight. Instead of being a transmitter of auditory input, the school could become an ally of the arts, and a center for the study of science and history.28

Another dualism which Dewey battled was the one in which play and work were separated. That school learning must be "disconnected from experiences outside the school door" was wrong to him.

Study of mental life has made evident the fundamental worth of native tendencies to explore, to manipulate tools and materials, to construct, to give expression to joyous emotion, etc. When exercises which are prompted by these instincts are a part of the regular school, the whole pupil is engaged, the artificial gap between life in school and out is reduced...

...that knowledge—getting an outgrowth of activities having their own end, instead of a school task.29

As seen in the examples, Dewey believed that schools should be places in which learning takes place by the students' being engaged in physical and mental activities. He believed that students should be involved in exploring, manipulating, constructing, and giving expression. There is much similarity in Dewey's thought and the thought of current music educators. Dewey felt that activity and involvement by students was necessary for learning to take place, and music educators currently feel that activity and participation enable students to learn and apply principles of music. Dewey implemented many of his plans in the University of Chicago Laboratory School in the early twentieth century; music educators have adopted several new methods and approaches for teaching music in the late 1960's and early 1970's.

Many of these techniques create opportunities in music for children to feel a sense of personal involvement and to engage in manipulative and expressive activities. The dimensions of music—rhythm, pitch organization, simultaneity, timbre, expression, and form—can be learned by the student who is being directly involved in both physical and mental activities. By the student's involvement and participation, music becomes a part of the student coming from within rather than being thrust upon him by others.

One of the techniques currently being used in music education is the Carl Orff approach for teaching music. Orff's basic concepts of (body) movement and its importance in music education describe the part which active participation plays in teaching students. The basic philosophy of Orff in regard to movement education has been set down by K.H. Ruppel in Musik und Bewegung.

Dieses Buch gibt...Einblick in die Arbeit der elementaren Musik und Bewegungserziehung, wie sie in dem "Schulwerk" von Carl Orff niedergelegt ist.

Grundprinzip dieses "Schulwerks" ist es, dass sein spätere Ausbildung nicht sowohl "künstlich" als auch "von Kindern" aus eigenartig und entwickelt wurde. Seine Voraussetzung ist die Anerkennung des Kindes als naturnahgeborene und natürliche Persönlichkeit, die durch die in musikalischen Umgang sich bewegen und aus ihm erwachsenen pädagogischen Kräfte zur geläufigen, seelischen, ethischen und gesellschaftlich bewussten, zur "gebildeten" Persönlichkeit geformt werden soll.30

This book gives...a look at the work of elementary music and education in movement, which are the principles laid down in the "Schulwerk" of Carl Orff.

The fundamental principle of this "Schulwerk" is, that the course of instruction is not only "for the child" but also, "from the child." Its pre-supposition is the recognition of a child as having an inherited natural personality in which the musical foundation lies dormant. This personality should become formed into an educated personality by the enlightening of it with pedagogical powers to a spiritual, psychological, ethical and social consciousness.
Orff believes that rhythm is expressed constantly in the speech and movement of a child and it is hers that he begins musical education. He does not talk about movement to the students, instead, the students are immediately involved in movement activities. In the "Rhythmische Übung" section of Musik und Bewegung, Susa Böhm has described one of the first rhythm activities.

Das Spiel mit dem Rhythmus beginnt: Klatschen - Patschen - Stampfen - und Schnalzen wird in verschiedenen Verbindungen geübt.1

The play begins with rhythm. Clapping, tapping, stamping, and snapping will have been drilled in different combinations.

Another new method currently being employed in music education is contained in the work of Zoltan Kodaly. He has established a system in Hungary for music education which is used in all of the schools at all levels. An American, Mary Helen Richards, among others, has adapted Kodaly's system for use in this country at the elementary level. Her adaptations employ a set of charts. This system, both in Hungary and the United States is based in part on rhythm. Richards has elaborated about the system and emphasized the importance of activity in the Preface to her Threshold to Music.

Both my system and that in Hungary are based on a sound rhythmic foundation, which is taught with rhythm syllables and such physical movement.2

Two other educators who are interested in movement in relation to music and drama are Emile Jacques-Dalcroze and Madeleine Carabo-Cone.

Two current approaches for teaching music also require much involvement and participation by students, the CMP (Contemporary Music Project) and the Manhattanville approach. Both involve activity by students for the learning of musical dimensions. In the University Laboratory School of the University of Chicago in Dewey's time, one of the activities in which the students participated was an exercise combining music with drama. It has been reported by Dewey and his daughter in their book, Schools For Tomorrow.

In the upper grades, literature and history, as already indicated, are often reinforced by dramatic activities. A sixth grade in Indianapolis engaged in dramatizing "Sleeping Beauty," not merely composed the words and the stage directions, but also wrote songs and the music for them.

This learning situation at the University Laboratory School is an example of combining music exercises with other activities. This author has designed several study-units for use at the elementary level which combine the principles of music education with the principles of career education. The principles of music education, for these study-units, include some of the latest techniques and approaches of current practice in music. The principles of career education, for these study-units, include the two-fold objective of career education in the 1970's as discussed previously in this study: the purpose of an awareness of a career or "occupation" and the purpose of an awareness of a "being-occupied-with" an activity.

Young Audiences, Inc., a national organization, is currently providing a significant amount of musical education. Its content is readily adaptable to the combination of the principles of music education with the principles of career education.

The final section of this study will explain the study-units and will include two study-units as examples.

STUDY-UNITS

This author has designed several study-units which combine the concepts of career education and music education. These units have been implemented in the vocal music program at the elementary level in one of the elementary schools in the Maplewood-Richmond Heights School District in St. Louis, Missouri. Missouri is one of the states which has adopted the use of career education, and the Maplewood-Richmond Heights School District has begun to include career education as part of its curriculum.

These study-units have an objective in music education which is to enable students to learn the dimensions of music through participation in activities. They also have an objective in career education, which is actually two-fold. The first of these purposes in career education is an awareness of a particular career in music; i.e., Dewey's "occupation." The second purpose is a "being-occupied-with" musical activities.

An example of this two-fold objective in career education would be an activity in which a professional symphony musician would visit a class to perform on the violin. The first purpose of this visit would be for the students to gain an awareness of the work of the violinist; e.g., training, auditions, rehearsals, concerts, tours, wages, etc. The second purpose would be for the students to gain an awareness of their own involvement with music either as a leisure or professional activity; whether it be as an elementary instrumental student, a member of an amateur or professional music ensemble in their later life, a solo performer, or as a listener of music.

Each study-unit has four parts: the "Group Activity," the "Music Objectives," the "Career Objectives," and "Individual Activities." For the purpose of this study, the author has not included any detailed lesson plans, but only general content description. The aim of the author is to show the combination of the prin-
ciples of career education with the principles of music education; therefore, the "Music Objectives," "Career Objectives," and "Individual Activities," parts of the study-units include suggestions for activities but do not include specific exercises.

The "Group Activity" part of each study-unit is a project in which a large group may participate; e.g., a field trip by a group to a musical event or a visit to the school by someone.

The "Music Objectives" part of each study-unit lists the dimension or dimensions of music which are relevant to the "Group Activity."

The objectives of career education are divided into two parts in each study-unit. The "Career Objectives" part of the study-unit lists the career and has as its objective, an awareness of a particular career in music. The other objective of career education, as previously defined in this study, is met in the "Individual Activities" part of each study-unit. These "Individual Activities" are the "being-occupied-with" music activities which are intended for use by an individual student or by small groups of students. The "Individual Activities" may be used before the "Group Activity" takes place, or as enrichment material after a "Group Activity" has taken place.

Brief outlines of two of the author's study-units complete the paper.

I. Group Activity:
   Field trip to a symphony orchestra concert

   Music Objectives:
   The study of timbre in reference to orchestral playing.
   The study of rhythm, pitch, simultaneity, expression, and form with reference to concert pieces.

   Career Objectives:
   Awareness of careers of symphony orchestra personnel
   symphony musicians
   conductor
   orchestra manager
   ticket sellers
   ushers

   Individual Activities:
   Participation in lessons as part of an elementary instrumental program
   Demonstration of instruments by students to others
   Exercises in conducting music
   Listening activities using recorded music

II. Group Activity:
   Visit to the school by a jazz musician

   Musical Objectives:
   The study of form in reference to jazz.
   The study of improvisatory techniques.
   The study of rhythm, pitch, simultaneity, and expression in reference to jazz.

   Career Objectives:
   The awareness of careers in jazz playing.

   Individual Activities:
   Study of different kinds of jazz; e.g., New Orleans, third stream, etc.
   Study of Black American's music and its part in the development of jazz.
   Exercises in improvisation on melody instruments; e.g., piano, recorders, kazoo.

FOOTNOTES


3. Ibid. p. 2.

4. Ibid. p. 3.

5. Ibid. p. 5.

6. Ibid. p. 9.


8. Ibid. p. viii.


10. Ibid. p. 171.


12. Ibid. p. viii.

Books


Periodicals


It is during this era that what can be termed, "the dilemma of the Black arts" becomes clear. In short, the dilemma is that Black artists have always had to depend upon white society (audiences and art industries) in order to attain recognition. This being the case, the Black arts have had to be compromised in order to attract white_RENDERED_money. During the period after the 1890's, when white interest in Black arts yielded to racism, the "white thumb" was lifted from the Black arts and the practitioners were provided a brief opportunity to work in a purely Black, self-expressive context. It is during this period that the seeds of the Harlem Renaissance were planted. The flowers of these seeds would not be visible until the Twenties.

During these years preceding the "Renaissance", jazz was created by and for Black musicians — "without much help or approval from anyone else". The poetry of Claude McKay and works of other authors were being printed by a few obscure periodicals. A lyricist by the name of Noble Sissle teamed up with a composer by the name of Noble Blake. These independent events would culminate in a movement which would be centered in Harlem, New York City and which would give rise to the "New Negro". They occurred at a time when America was gearing up for a war with Europe by intensifying a domestic war against Black Americans.

The ideological roots of the Harlem Renaissance can be found in a 1914 interview with James Reese Europe, a Black musical director and composer. The interview was published in the March 13, 1914 edition of "The New York Evening Post". Mr. Europe is quoted:

"We colored people have our own music that is part of our heritage. It's us; it's the product of our souls; it's been created by the sufferings and miseries of our race. Some of the melodies which we play were made up by slaves...and others were handed down from the days before we left Africa. Our orchestra never tries to play white folks' music. We are no more fitted for that than a white orchestra is fitted to play our music. Whatever success I have had has come from a realization of the advantages of sticking to the music of my own people."

The true meaning of this statement was somewhat clouded by the terminology given it by the "Evening Post". The writer of the article interprets the remarks as Mr. Europe's insistence that Blacks should play their own "lower forms" of music, since they could never rival white musicians.

Nevertheless, a seed was planted with Mr. Europe's statement. His idea would re-emerge a few years later in the credo of the Harlem Renaissance. Robert A. Bone, in his "Background of the Negro Renaissance" would apply a new phrase to this credo—"Renaissance Nationalism."
THE FLOWERS BLOOM

The Harlem Renaissance has been a subject of much interest, particularly since the emergence of Black Studies in the 1960's. Much of the material written about this period has focused solely upon its literary contributions. Black music of the era has been primarily regarded as belonging to the "Jazz Age", which is viewed as paralleling in time, but being quite distinct from the Harlem Renaissance. While "the Renaissance" is regarded as a Black literary movement, "the Jazz Age" is regarded as a racially all-encompassing, fun-loving era following upon the heels of a smashing American victory in World War I. Furthermore, while the Renaissance is viewed as local, in that it was centered in Harlem, the "Jazz Age" is viewed as a spirit which swept the nation.

For the purposes of this essay, it would be irrelevant to seek to determine whether the Harlem Renaissance and the "Jazz Age" were one (or separate) phenomena. That question is purely an academic one. This essay will, however, seek to show that Black music was an integral part of the "Renaissance" and that it enjoyed a multi-faceted role in it: catalyst, contributor, and beneficiary.

As was mentioned earlier, the development of jazz occurred a few years prior to the Harlem Renaissance. Beginning in 1917, many of the early jazz innovators began to congregate in Harlem. Small nightclubs became centers for "jam sessions", where the music was continually refined and innovated. Louis Armstrong, "Duke" Ellington, "Cab" Calloway, Bessie Smith, Earl Hines, Fats Waller, Fletcher Henderson, and others centralized their talents around a new "mecca" for Black musicians, i.e., Harlem. Harlem began to buzz with new activity and life as the jazz performers began to congregate within its confines. Downtown whites began to "discover" the talent and rushed in to sit in the night clubs and listen to the music. With the "discovery" came recording contracts and engagements in posh downtown nightclubs. The Savoy Club and the Cotton Club in Harlem began to cater, almost exclusively, to white patrons, as did many of the other Harlem night spots. Here again, the "dilemma of the black arts", as described earlier, is demonstrated. Jazz became somewhat commercialized as it was popularized by the white influx. It was only in the small, undiscovered clubs and at the private parties that musicians could play their music as they felt it. Nevertheless, jazz was an inspiring force behind the Black Renaissance.

Both because of and in spite of the fact that Harlem was invaded by throngs of white entertainment seekers, the Harlem Renaissance occurred. Robert Bone, in his essay mentioned earlier, keenly observes this process. He notes that the Twenties were marked by a sudden upsurge of interest in Black life and culture among the white intelligentsia. He credits jazz with influencing the switch in climate from hostility to interest. Jazz, the rigidity and restraints of Victorian America. During this period, jazz created and came to symbolize a new Black stereotype: a symbol of freedom from restraint; a freedom for which the white intellectual longed.

The jazz was an important catalyst of the Harlem Renaissance. It helped to create a climate in which the notion of a dual culture, Afro and Anglo, was recognized by whites as well as Blacks. It helped to create a climate in which whites could read Langston Hughes' "What Happens to a Dream Too Long Deferred" and appreciate it with sympathetic, if often misguided, interest.

Even though jazz was patronized by white audiences, it did not forsake the nationalism: philosophy of the Renaissance. The jazz philosophy consisted of a rejection of the values of the dominant culture and a search for values consistent with the Black heritage. Preservation of the Black identity replaced the path of blind assimilation. Jazz embraced this credo. As Langston Hughes wrote, jazz is "the tom-tom of the revolt." It was a symbol of "the New Negro" and an inspiration to the Black artists of the period.

In another context, music was a contribution to the Harlem Renaissance. In 1921, a Black musical revue, "Shuffle Along" opened in New York. John Hope Franklin writes that it was "the most brilliant musical revue that New York had ever witnessed." Eubie Blake and Noble Sissle wrote the music and lyrics for the tunes. These included "I'm Just Wild About Harry", "Love Will Find a Way", and "Shuffle Along". The show enjoyed a record-breaking run and was the most popular show in New York in 1921 and 1922. Other Black musical revues produced during the Harlem Renaissance include: "Runnin' Wild", "Chocolate Dandies", "Dixie to Broadway", "Put and Take", "Blackbirds", and "Africana".

The Black spirit was present in "serious" music as well. Harry T. Burleigh, R. Nathaniel Dett, Carl Ditton, and J. Rosamond Johnson wrote and edited Negro spirituals and other musical scores. Paul Robeson, Lawrence Brown, and Taylor Gordon presented programs composed entirely of songs written by Black Americans. The spiritual gained recognition as an important Black musical form and many were included in the repertoire of Jules Biedenbogen, Abbie Mitchell, and others.

Thus, while Black music, particularly jazz, created a climate for the Harlem Renaissance, it also made contributions to the movement itself, through producing musical works consistent with the credo of the period. In addition, the public was introduced (or in some cases, reintroduced) to earlier Black music forms such as the blues and ragtime, and to dances such as the "Cakewalk". This introduction was made possible by the musical revues of the period.

Lastly, Black music was a beneficiary as well as catalyst and contributor to the Black Renaissance. It provided much work and recognition for Black musicians.
and composers, it placed Blacks in the forefront as cultural leaders, rather than followers. It lifted the music of Black Americans to a new prominent position within American society. Also, it provided a nationalistic context in which Black artists (including musicians) could join together to discover, reflect upon, and experiment with their roots and heritage through the arts. The Harlem Renaissance was much more than a Black literary movement. It was a convergence and confluence of Black artists from every field, creating a new spirit for the Black arts.

SUMMARY AND CONCLUSIONS

This essay has attempted to show how the Harlem Renaissance, which is usually regarded as a Black literary movement, was influenced by Black music. It may be true that many of the writers of the period, except for Langston Hughes, did not seriously acknowledge the contributions of Black music, particularly jazz, to the movement. This can only be cited as a weakness of those artists, as evidence seems to indicate that Black music not only contributed to, but spearheaded the "Renaissance." As perhaps the earliest form of Black self-expression, Black music led the way towards the Harlem Renaissance, contributed to its products, and benefited from its existence.

The Harlem Renaissance, as such, ended a decade after it began with the Great Depression. Its spirit has never died, as it re-emerged with new intensity in the 1960's. Black music continues to play an important role. To understand this importance, one need only listen to Nikki Giovanni as she combines her revolutionary Black poetry with Black music.

Langston Hughes

HARLEM

What happens to a dream deferred?

Does it dry up like a raisin in the sun?

Or fester like a sore
And then run?

Does it stink like rotten meat?
Or crust and sugar over—like a syrupy sweet?

Maybe it just saggs like a heavy load.

Or does it explode?

SAME IN BLUES

I said to my baby,
Baby, take it slow.
I can't, she said, I can't.
I got to go.

There's a certain amount of traveling
In a dream deferred.

Lulu said to Leonard,
I want a diamond ring.
Leonard said to Lulu,
You won't get a goddamn thing!

A certain amount of nothing
In a dream deferred.

Daddy, daddy, daddy,
All I want is you.
You can have me baby—but my lovin' days is through.

A certain amount of impotence
In a dream deferred.

Three parties
On my party line—
But that third party,
Lord, ain't mine!

There's liable to be confusion
In a dream deferred.

From river to river,
Uptown and down,
There's liable to be confusion
When a dream gets kicked around.

FOOTNOTES


5. Ibid., pp. 60-61.

6. Ibid.


9. Ibid., p. 96.

10. Ibid.


12. Ibid., p. 415.

13. Ibid., p. 416.


15. Ibid., p. 510.

16. Ibid.


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ABSTRACT

AN EVALUATION OF THE AVII MODEL: A SYSTEMATIC APPROACH TO AURAL-VISUAL IDENTIFICATION INSTRUCTION IN MUSIC FOR YOUNG CHILDREN

June Thomsen Jetter, Ph.D.
North Texas State University, 1975

The problem of this study was to obtain empirical evidence of the functional nature of the Audio-Visual Identification Instruction (AVII) model for designing effective music instruction for young children. The method was to use materials prepared according to the model specifications in actual classroom conditions.

The purpose of the study was to compare the achievement gain of second grade children of high, middle, or low musical aptitude levels, who were instructed by experienced music specialists, first year music specialists, student teacher music specialists, or experienced classroom teachers using AVII model materials, on three tasks in the area of pitch and three tasks in the area of timbre.

Concept development instructional models provide for: 1) stated behavioral objectives, 2) use of both positive and negative examples of an instance to help the learner acquire all of the critical attributes of the concept, 3) a name that commonly designates the specific phenomenon, 4) immediate knowledge of results on practice items, and 5) practice in developing facility in association of verbal cues and stimuli. The AVII model provides for each of these specifications in musical naming and identification tasks.

A quasi-experimental pretest-posttest equivalent materials research design was used for the investigation. Four teacher type levels and three student musical aptitude levels were used. The design included a repeated measures factor in that three sub-tasks were sampled in the area of pitch identification and three in the area of timbre identification.

Two instruments were used for measurement: the Primary Level Musical Aptitude Profile and a criterion-referenced achievement measure for the instructional units used in the study which was used as a pretest-posttest instrument.

The sample consisted of 14 intact second grade classes in eight elementary schools in the Kansas City area, representing a broad range of socio-economic and cultural backgrounds common to urban populations. Two teachers in each teacher type category used the AVII materials in regularly scheduled music classes. Complete data sets were obtained from 203 subjects.

After all units of instruction had been administered, the three sub-tests of the Primary Level MAP were administered. The data were computer-processed by regression procedures for analysis of variance using a least-squares method. Planned comparisons of group means were carried out using a Least Significant Difference test.

Although each student group demonstrated significant achievement gains on both pitch and timbre tasks, instruction could not be considered to have been equated across teacher type. A significant variance was shown for teacher type effect. The comparison of group means showed the achievement gain of children instructed by first year music specialists to be significantly less than for other teacher groups. A significant interaction for teacher type and musical task was found to be due to the larger gain on pitch tasks made by children instructed by experienced classroom teachers as compared to the gain they made on timbre tasks.

There was no significant effect for student musical aptitude or for musical task, no other significant two-factor interactions, and no significant three-factor interactions. Only teacher type appeared to have a significant effect on student achievement when AVII model materials were used for instruction. The factor that appeared to explain the teacher type effect was teacher experience. The experienced cooperating teachers who supervised the student teachers in this study may have contributed the necessary experience factor for the significant gain demonstrated for students instructed by student teacher music specialists using the AVII model materials in this study.

Subject to the circumstances and limitations of this investigation, the results indicate that the AVII model is effective for instruction for musical naming and identification tasks for young children.

FOOTNOTES

ABSTRACT

AMERICAN COMPOSERS AFFILIATED WITH AMERICAN COLLEGES AND UNIVERSITIES: BIOGRAPHICAL SKETCHES, THEIR PRODUCTIVITY, PROFESSIONAL STATUS, PERFORMANCE OF WORKS AND ATTITUDES TOWARDS UNIVERSITY PATRONAGE

Hugh William Jacobi, Jr., Ed.D.
Washington University, 1974

The primary objective of the dissertation is a report on a questionnaire survey of variables relating to job, family, social and personal variables and their relationship to productivity. In addition, a biographical dictionary of 665 American composers affiliated with American colleges and universities, is compiled for library and general use.

Composers' physical relationship to perceived musical centers of the United States are identified. The United States was divided into regions as used by the Music Educators National Conference. The use of these divisions will demonstrate the relationship, if any, between the proximity of a Major Symphony (Class A) and a clustering of composers in the universities.

Throughout the paper, statements are made in regard to the needs of the composer: available patronage, the composer-in-residence, and the general attitude of the contemporary composer. A biographical profile of 565 selected American composers is presented, including their education, membership in organizations, listings of major compositions and other career factors.

ABSTRACT

INSTRUMENTS AND VOICES IN CONTEMPORARY CHRISTIAN WORSHIP

Phillip C. Posey, Doctor of Musical Arts
University of Missouri-Kansas City, 1974

It is the purpose of this dissertation to review and evaluate musical compositions written for instruments and combinations of instruments and voices suitable for use in services of contemporary Christian worship. The scope of the research is delimited to compositions not exceeding fifteen minutes in length, and published in the United States from January 1, 1945 until December 31, 1973. From this data a stylistic profile of church music during the specified time period, and an annotated bibliography is presented.

The stylistic profile includes both quantitative and qualitative analysis and numerous musical examples gathered during the research. The annotated bibliography comprises the main section of the dissertation and includes nearly eight hundred entries organized in ten sections and annotated regarding instrumentation, difficulty, availability, style, duration, and a narrative description of the performance requirements.

The music used in the research was gathered from ninety-six publishers and composers throughout the United States. Although other bibliographies were consulted in order to locate the source of materials, all music was reviewed and annotated from actual copy. Only those selections considered appropriate for use in a service of Christian worship were reviewed. Value judgments regarding the musical or spiritual worth of the music have been generally avoided.

From this study it is obvious that music suitable for use in the service of Christian worship is readily available for nearly any combination of instruments and voices. The diversity of styles, functions, and instrumentation provide an excellent supply of music for nearly any type of worship occasion. It is hoped that this material will provide an incentive for the increased use of instrumental music in our churches and a viable index of suitable material.
ABSTRACT

KATHERINE K. DAVIS: LIFE AND WORK

Harrison C. Boughton, Doctor of Musical Arts
University of Missouri-Kansas City, 1974

Katherine K. Davis has been composing and arranging music and writing lyrics since her childhood and has been engaged in this work as a full-time profession since 1930. Her work is abundant, well-known, and widely performed. Since no extensive research had previously been done about Miss Davis or her work, it was determined that this would be a significant contribution. The specific objectives were: 1) to present her general biography; 2) to trace her musical and literary education and development; 3) to investigate her work as a composer-arranger-lyricist; and 4) to compile a complete listing of Katherine K. Davis' works including the voicings, source of melody, source of text, publisher, and date of publication for each selection.

Most of the information was gathered through personal interviews with Miss Davis at her home in Concord, Massachusetts. Material was also obtained from her through personal letters, telephone conversations, an unpublished autobiography, scrapbooks, and personal papers. Additional information was acquired through personal interviews with, and letters from, acquaintances of Miss Davis, by investigation of articles in newspapers, journals, and magazines, and by visits to the Saint Joseph, Missouri and Concord, Massachusetts Public Libraries.

A complete listing of works was obtained from copies of music held in the music library of the Conservatory of Music of the University of Missouri-Kansas City, Miss Davis' personal library, church and school music libraries, and publishers' catalogues, letters, and brochures.

The study revealed that most of Katherine Davis' work is in the medium of choral arrangements and compositions which have been created for school and church choirs. This type of material has been most lucrative for her and this has been a primary factor in the motivation of her production. She has also produced solo voice arrangements, music dramas, extended choral works, and collections, keyboard works, orchestral compositions, string quartet arrangements, and texts for many of her works and other published series.

Miss Davis' compositional technique is characterized by appealing melodies, effective rhythms, interesting descants, and reasonable ranges and accompaniments. When composing, Miss Davis prefers to write the music first and then adapt or create a text for it. In her creative process, she depends more on her innate talent than on studied theoretical techniques. Katherine K. Davis, at the age of eighty-two, is still arranging, composing, and having works published.
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Contributions to this Journal should be sent to Lewis B. Hilton, Editor, Washington University, St. Louis. Authors should observe the following rules in preparing their manuscripts: The editors welcome contributions of a philosophical, historical or scientific nature which report the results of research pertinent in any way to instruction in music as carried on in the educational institutions of Missouri.

Articles should be typewritten, with double spacing throughout, including footnotes, long quotations, and itemized lists. Footnotes should be placed consecutively at the end of the article, beginning on a new page, using triple spacing between notes. Authors reporting quantitative studies may substitute a list of references for footnotes in accordance with practice followed in many scientific journals. In all instances, manuscript style should follow recommendations made in the MLA Style Sheet. The Chicago Manual of Style should be followed in setting up tables, charts and figures, which should be numbered and placed on separate pages.

Note: All contributors are advised to keep a copy of any manuscript submitted. The Editorial Committee cannot be responsible for loss of manuscripts.

Published by Missouri Music Educators Association

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PREFACE

The Missouri Journal of Research in Music Education, published by the Missouri Music Educators Association, is devoted to the needs and interests of the school and college music teachers of Missouri and the nation. This issue, Volume III, Number 4, is the fourteenth to appear in as many years.

The members of the Editorial Committee are grateful to those teachers who have written suggestions concerning the content of past issues, and request that criticisms and suggestions, always welcome and never unheeded, again be sent to the Editor concerning the content of this issue. We strive for a reasonable balance among music theory, history, philosophy or aesthetics, and pedagogy. It is difficult to judge how successful we are without reader response.

Since this publication is not copyrighted, complete articles or excerpts from articles may be made without securing permission from the editor or the authors. It is requested that credit be given to the Missouri Journal of Research in Music Education.

We express our deep gratitude to the Missouri Music Educators Association and to its president, Dr. Vynn Hartell, for so generously shouldering the Journal's financial burden to make it possible to continue to publish the Missouri Journal of Research in Music Education.

The Editorial Board

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HUMANISM AND THE WHOLE NOTE

Gloria Hayes Rosenberg
Washington University

The title of this paper was carefully chosen to attract the attention of those who share a mutual concern of providing musical experiences that strive toward developing musical skills that assist in the development of the whole person. While the title may suggest sarcasm, the content is a sincere attempt to inform educators of their role to educate the development of the whole individual. There are many parents, teachers, administrators and other educators who share my interest in educating students.

Accompanying this concern are numerous frustrations, anxieties, and questions. The questions are as numerous and complex as the possible solutions. For instance, how does the teacher, and especially the music teacher, facilitate the development of the individual? Teachers are bombarded with many more complex problems. For example: What are the parts that make up the whole individual? Who determines whether the child is becoming a whole person? What methodologies and strategies does the teacher use to insure the development of the whole person? And above all, how does one evaluate the degree of wholeness?

The whole person and the whole note share the same adjective, whole indicating completeness. The assumption is both music education and biological studies is that everything is put into context. In putting this whole into context a great many of the above questions arise. Often, many educators analyze the parts that make up the whole so carefully and look down the study of each to the extent that neither the educator nor the individual can put the parts together. When an effort is made to put the parts together to show how all the parts work together and how the parts work together to show how all the parts work together is made, many individuals are unaware of how they relate, and spend the greater part of their life confused as to how to fit the parts together.

To be meaningful, yet full (whole or complete) life must incorporate correlation, repetition and variety. A present balance between these: not too much correlation, not too much repetition and not too much variety will produce the most purposeful, yet most abundant life of all.

An artist would never think of capturing the subject on canvas by painting just the facial or physical features of the individual without attempting to capture the mood, feelings, and skin coloring. The same is true of the architect who is designing the blueprint of a building considers the landscape, the materials to get the effect, and the locale. By the very nature of man's complicated makeup is reason to believe that one cannot study any part of the individual without touching on the individual in its entirety.

Cognitive psychologists (Max Wertheimer, Kurt Koffka, Wolfgang Kohler, Kurt Lewin, et al.) regard man as a unity whole and maintain that "the investigation of behavior can be successful only to the extent that it emphasizes the entire reacting organism (in its entire environment) and not merely its parts or isolated responses." Music is a multidimensional art. The many components that make up this art (creativity, melody, rhythm, timbre, form, emotions, fantasy, language, science, history, acoustics, etc) are evident and obvious in their separate but relatedness to music. Unfortunately, in the need to teach so thoroughly we fail to emphasize how the parts interact with each other.

To analyze the factors in social skills and focus upon then one at a time is to destroy the essence of the musical experience, which is an entity greater than the sum of its parts.
It seems strange to separate this multidimensional art into parts. Unknowingly, however, we fall into this situation. An example of this separation of teaching is in the following example.

The music teacher is teaching a lesson on note values in a class. While teaching the class how to recognize the different notes and differentiate their values, the teacher may have ignored or forgotten to discuss sequence, repetition, form of feelings, about the piece.

There are two dangers in the above example:

1. The skill (note values) are taught in isolation and therefore lacking in relevance to other songs.

2. This method is ineffective in terms of the student being capable of transferring this knowledge.

The author wants to emphasize that she does advocate that skills be taught but never taught in a vacuum. Skills should, however, be taught in a learning context that stimulates the child's imagination and thought.

There is no sure-fire prescription for educating for the perfection of the whole person. Neither are there specific course outlines or strategies that guarantee the teaching of music in its entirety. Only through risk-taking, encouraging, and allowing can the teacher help the child become a whole person.

Any system or mode of thought in which human interests prevail, and the right of man to determine his own actions is defined as humanism. Carl Rogers' theory of humanism is the individual concerns himself with the world as he sees it rather than how it appears to others. For many educators, the role of education is described as an alternative for educating the whole individual is misleading and frightening. Many educators view allowing students to explore and express feelings about areas of the music unknown to the teacher as frightening and repressive. Due to the coyness, personal and intuitive nature of this form of education it is viewed with suspicion.

We live in an era in which adults no longer have confidence in their ability to create humane institutions that serve rather than inhibit individuals striving toward self-fulfillment. Perhaps in our disenchantment with society, we have lost sight of three important educational goals: What human nature is and what it can become; the extent to which nature (human and non-human) can and should be manipulated and controlled; and the relationship between public and individual morality.

Music teachers are especially suspicious of fostering the personal growth of students in the music classroom. There is so little time in the school schedule for music lessons, we can not afford to rob the students of even more opportunity for musical exposure. Another problem is trusting the students' ability to know what information is necessary for their total development. There is an even greater fear in trusting the desire of the student to learn how to learn music and develop interpersonal relations.

In most instances an important factor is overlooked. The music classroom offers an excellent opportunity for children to experience music, discover themselves and to develop themselves. The way in which the music program is operated helps them develop themselves. The design of the program combined with the flexibility of the activities can help the student get the most out of music. The hope is that teachers and children realize how learning how to learn serves as a mode of transportation for development of self and sensitivity. Nye and Nye, in the book Music in the Elementary School, state the aims of these factors:

These (development of self and sensitivity) include an inquiring and challenging mind, the capacity to analyze on his own level, making original interpretations, and a tendency to try out things and to experiment. He (the student) should ultimately be able to manipulate the components of music in creative ways.

The dominant theme running through humanism is concern for the individual student. The theory is not a new one. Dewey, Rousseau, and Piaget are three of the most supported similar theories:

1. Children learn best when they have rich first-hand experience with concrete objects and situations.

2. In a rich stimulating environment, the child will discover, manipulate, plan, question, and practice things that are important to him, although some children may at times need guidance and encouragement.

3. Materials should be appropriate to the child's level of thinking and related to the child's acquired knowledge, experience, and interests. Thus, he may make a smooth transition from what is known to what is new.

4. By concentrating on what the child can do, the teacher is likely to gain the child's cooperation, confidence, and active involvement in his own learning.

5. The social context of the child's life is closely related to his cognitive growth; thus, continuing opportunities to talk, work and share with children and teachers will enhance his cognitive growth.

The growth of the mind knows no limits. It continues as long as the person is actively involved in sensing, and feeling and doing. These numerous activities permit the student to explore all possible aspects of the activity. As the student engages in search, discovery and creativity, he is discovering and expanding himself. Another component of growth involves the awareness of feelings and wants above all the sharing of these feelings.

Charles Silverman emphasizes how important it is to bring feelings into education if we are to educate the whole person. He gives us examples of creative civilizations that declined in part from the imposition of purely intellectual and purely analytical education. At the same time he cautioned against vacillating to the other extreme of valuing feelings to the exclusion of intellectual and analytic thought. Silverman states, "The false dichotomy between the cognitive and 'affective' domain can only cripple the development of thoughts and feelings." The teacher draws from the knowledge, interest and feelings of the student to achieve educational goals. This is accomplished by activity in such a way that a student gets more out of the activity than a skill.

This, too, is an area that is frightening to many educators. Instead, they spend much of their time and energy attempting to guess at what content is most meaningful for all the students and what method of teaching is most effective.
These, and other questions, can be answered, and with more effectiveness, if educators are able to discover the feelings, fears and wants that either motivate the child to learn or to resist learning.

The author is willing to predict that those educators who focus their attention on the human while in the process of educating will have fewer anxieties and more success in facilitating the growth and development of students into nature adults.

We must begin with what children see, do, and know, and have them talk and write about such things, before trying to talk to them much about things they don't know ... But when we do what we do most of the time in school—begin with meaningless symbols and statements, and try to fill them with meaning by way of explanations, we only convince most children either that all symbols are meaningless, or that they are too stupid to get meaning from them.3

Music is an art which expresses ideas and emotions through rhythm, melody, harmony, and dynamics. It seems only natural, then, that music teachers not only be conscious of the dynamics of music, but also encourage students to realize and experience these dynamics. As the student learns and experiences the total learning environment, learning becomes more meaningful to his whole process of development. Once the student becomes aware of the effect of music and learns how it relates to his total life, he has a need to learn, know and expand himself. The expansion may come in the form of exploring his place in the musical world and/or the place of music in his world.

The teacher promotes learner growth by knowing how and when to get out of the way of the developing learner and how to encourage continued development.10

The one vital responsibility of the teacher is to create learning activities and environments which enable students to create, discover, and to initiate learning. Discovery, after all, is the essence of learning, and learning must be achieved by doing.

Sally Mensour, author of Music in the Open School, has suggested nine possibilities the music teacher may use to stimulate this type of learning in the music class:

1. Accept all levels of musical interest.
2. Plan musical experiences in flexible ways, using a variety of musical resources and materials.
3. Assimilate various musical styles into the curriculum:
4. Respect children on different musical achievement levels.
5. Adjust musical plans and prepared materials to changing situations.
6. Respond to the behavior of children in a reinforcing way.
7. Prepare musical experiences so that each child will be interested in something.
8. Use "friendly" persuasion as a directional behavioral tool.
9. Determine the atmosphere in which firmness is required.11

Honors stresses the need for the teacher to be both flexible and open. Listed are some elements the music teacher should be aware of at all times. When the teacher's mind is focused on these elements the learning experience for both the music teacher and the student can be meaningful and pleasant. The elements repeatedly state the significance of the music teaching being open:

1. Open to the changing and developing nature of children's musical interests.
2. Open to the individual child's learning level.
3. Open to children's feeling and emotions.
4. Open to the non-directive roles of the staff.
5. Open to the direct involvement of parents.
6. Open to variety and change in room arrangement.
7. Open to activities that are distributed rather than centralized.
8. Open to the learner's own evaluation of work and behavior.
9. Open to the child's total environment as affecting this learning.
10. Open to spontaneity in day-to-day routines.12

In the process of working out what to teach, where to teach, and to whom to teach, educators spend too little time clarifying for themselves why they teach. All of these are extremely important as educational development of the child's attitude. The question of why we educate defines and clarifies the relevance of educating youngsters, not merely for the present, but for the future.

Education is looked upon as a process whose purpose is to provide the learner with insight as to how to work and play with others, to make decisions by himself, and to aid in the attainment of a good healthy life. Rousseau saw education as a means by which individuals would be freed from prejudices and released from the stagnating effect of tradition. Tolstoy insists upon characterizing education as essentially: "The process of freeing the individuals for creative improvisation through understanding." Both Tolstoy and Rousseau viewed education as a process of enriching the child for future knowledge.

The subject, whether music or some other subject, must prepare students for the realities of the world. The educator then has the responsibility of realistically and objectively examining the total world to aid the student in expanding his life beyond the specific skill of the subject.

One of the teacher's major tasks is to find ways through which material can be made meaningful for the pupil, to motivate him to provide satisfaction for him in learning so that his schooling will be tremendously enjoyable.14
In my own dissatisfaction with my preparation to cope with situations unrelated to music, I have begun to integrate into my music classes as many intellectual awareness as are needed by each individual student. A part of learning the various musical skills is discovering and experiencing the emotional responses and curiosities of each student. This helps the student implement what he knows while retaining knowledge about that which is unfamiliar. The emphasis is on an attempt to foster long-term life skills. This form of education contributes to enhancing students' awareness and growth of self. The author feels that more comprehensive learning takes place when knowledge of subject and self come from within the learning of the subject. Hopefully, the student sees himself as having the capacity and the resources to learn, and then can take responsibility for much of his own learning.

Schooling must become more than a launching pad for tomorrow. Somehow, it must be good while it is going on. Learning how to learn must overshadow the acquisition of methods, skills, knowledge. Processes by which new problems are met are more relevant than answers from the past. School must be thought of as learning centers, not teaching centers. They must become places where one goes to have experiences, where there are opportunities for the young to find their way. Schools have a function and teachers a task— to provide meaningful opportunities for active student participation in the spectrum of learning decisions in a maturing, sustaining environment designed to foster personal autonomy.

It is important to restate that teaching in the classroom is only one part of a number of parts that add the thrill in developing himself as a healthy individual. Like teaching, recognition of whole notes is only one part of educating the student in the music classroom. The major goal of any educator is to assist the student in becoming educationally self-supporting in learning that extends outside the classroom and in the future.

Educators, including music educators, must be able to cope with the unknown; and thus must develop activities that facilitate not only the basic understanding of a skill, but provide experience and know how in responding to other situations. As a music student is presented with musical skills that challenge his ability to respond creatively and sensitively to musical skills, he is preparing himself to maximize learning of all kinds. It seems possible to clearly understand the relevance of integrating all forms of musical instruction to life-skill expectations. Innovative music projects allow students to perform with all types of learning in long-term meaningful and relevant ways. Music is therefore seen as enhancing the student's life skills beyond the classroom.

There is hardly an area of living in which cognition is not important, and though we are prone to emphasize the subjective and emotional nature of music, knowledge is essential to valid experiences with music. The elementary and secondary schools often devote too little time to cognitive learning while at the same time basing evaluation of progress upon cognitive measurement.

As stated earlier, life is a process of growing and people are also growing organisms. The process of life can most effectively be understood and improved by focusing upon the dynamics of the growth process. Like life, music is an impulsive, infinite, spontaneous process. In an attempt to organize, control, and structure the organism or the art, a large amount of stifling unknowingly occurs. While educating the individual for his own well being, it is not for educators to totally predict the future life skill needs of the students. Not only do many educators attempt to predict the future or skills needed, but also attempt to educate students based on their own predictions. In order to even attempt to educate individuals, subjects and skills that the educator regards as necessary. Music educators are not exempted from educating children to develop physical and moral habits in addition to cultural habits and knowledge.

Education is a compulsory, forcible action of one person upon another for the purpose of forming a man such as will appear to us to be good; but culture is the free relation of people, having for it's basis the need of one man to acquire knowledge, and of the other to impart that which he has acquired."

Keeping in mind Tolstoy's statement, it is ever so important that as music educators, we allow as much time and attention to preparing students for future expectations as to development of whole persons. Important also to remember is that music education cannot be separated from social or emotional growth. This is supported in the works of men like A. S. Neil, Kurt Lewin, Roland Barth, John Holt, Carl Rogers, John Dewey, Jean Rousseau, etc.

In further understanding this principle, Alvin Toffler's words are helpful:

"While cognitive learning should continue to have high priority, the problems of integrating learning and living for the future clearly demand new emphasis on other kinds and styles of learning as well. Specifically, the curriculum must offer experiences in creative and speculative uses of the intellect as well as analytical uses. It must offer practice in dealing with people from diverse backgrounds of various styles of life with differing goals, as well as practice in understanding their problems from a distance. It must offer opportunities to act on the basis of what one understands as well as the opportunity to theorize about ideal solutions."

Transfer of learning is of the utmost importance if students are to be able to integrate the experience with goals outside the music classroom. This same type of transfer of learning is of equal importance in the study of the whole note as it relates to a specific piece of music or music in general.

FOOTNOTES
5. Staps, Fred, "Toward an Understanding of Open Education", (paper written for course at Webster College).


12. Ibid, p. 11.


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MUSIC IN OPEN EDUCATION
ITS RELATIONSHIP TO INDIVIDUALIZATION THROUGH THE USE OF LEARNING CENTERS
WITH EMPHASIS ON ELEMENTARY EDUCATION

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In these years of new interpersonal relationships, with each child expressing diverse interests and talents, teachers must begin to teach in a different way. There are several reasons found in the typical music classroom, such as thirty or more individual students, each with different needs and desires, being taught the same material at the same rate. Educators have become aware of the fact that a new method of teaching is necessary to teach each child individually, instead of the traditional method of teaching classes of children. One such method that is being accepted is that of open education.

This paper will be concerned with music in open education through an individualized program of instruction. The author will discuss the structure and rationale of open education, why individualization is necessary in the music curriculum, the role of the teacher in open education, and give some ideas of activities for an open classroom in music. First, the author would like to explain what open education is and discuss its present position and discuss some educator's views on this topic.

WHAT IS OPEN EDUCATION?

Open education is difficult to define because: 1. It does not stick to any single dogma. 2. There is no single organizational model that characterizes it. 3. It does not define the behavior of the teachers or the children. Its meaning can be understood best in terms of the assumptions underlying it and the mode of decision-making utilized in it. Three of these assumptions are: 1. Open education takes place as a result of an individual's encounter with his environment. 2. Learning is not linear. 3. When a child expresses himself, expression is a nurture of learning. The best definition of open education, if one is necessary, is the one given by B. W. R. Nyquist which states that open education "is based on the recognition that children are different and learn in different ways at different times, and from each other." He goes on to say that: "Students' feelings, interests, and needs are given priority over lesson plans, organizational patterns, rigid time schedules, and no-option structures." Because Nyquist thinks of each child, this leads to the term, "individualization".

WHAT IS INDIVIDUALIZATION?

The idea of individualization relates to open education because it is based on the belief and recognition that each child is an autonomous learner with different ways of learning, different learning times, and different needs and interests. Individualized instruction is "the process of custom-tailoring instruction to the needs of a particular learner." In an individualized program of instruction a child may successfully take a part in the design of his learning program, he may indicate some knowledge of his personal interests and his special dislikes. Individualization does not necessarily mean that one teacher will work with one child, but that the curriculum is designed to meet the needs required by the individual differences of the children. Usually these needs fall into a few general categories that enable the teacher to plan activities and guide skills development with groups of children.

There are three dimensions that can be adjusted to fit any learner in an individualized program of instruction: 1. The educational task. 2. The learners' behavior, that is, what the learner will do and how he learns. 3. The learning instruction, in order to achieve his goals. Learning is incremental, that is, learning is change from previously acquired knowledge and experiences, of the child's understanding. Learning is assimilation, and it relates to Piaget's developmental stages of a child, and the idea of assimilation, "the ability to reorganize and change the world into a structure that is personally meaningful."

Having accepted these two premises, we find we can no longer teach an entire class, on an assembly-line basis. The books and assignments of one grade level. Individualizing instruction, each objective will be custom tailored to a particular learner, not homogenized for the whole class and in reality fitting only a few. Students should not be allowed to get by with doing less work. A child should begin with a learning task he is able to perform and more systematically toward better academic performance. The teacher should make the decision if a child will work alone or in a group. However, this can sometimes change, depending upon a child's individual need that is recognisable by the teacher. For example, the teacher must be aware when a student desires to be alone, rather than working with a group.

The basic plan for individualizing instruction, different from the traditional teaching method, can be done through the use of learning centers in an open classroom type setting. Those who have never been into an open classroom and to those who have, the term open classroom brings to mind a variety of images. There is no set definition or description of what an open classroom is, but, perhaps the simplest explanation would be that it is a situation in which students have some choice about what they do and when they do it. It does not necessarily require drastic architectural changes in the building itself.

SOME EDUCATORS' VIEWS ON OPEN EDUCATION

Open classrooms, as well as the idea of open education through individualization, can be related to Dewey's ideas of progressive education, learning to do by doing and his ideas that everyone should be given the opportunity to learn at his own level and time period.

J. Dewey, in his book on Experience and Education, states that "The virtues of encouraging discovery are of two kinds. In the first place, the child will make what he learns his own. It will be his discovery, the interior world of culture that he creates for himself. Equally important, discovery and the sense of confidence it provides is the proper reward for learning. It is a reward that, moreover, strengthens the very process that is at the heart of education—disciplined inquiry."

John Dewey also states that "Individualization as a factor to be respected in education has a double meaning. In the first place, one is mentally an individual only as he has his own purpose and problem, and does his own thinking. As early as 1800, Johann Hennrich Pestalozzi developed an educational principle which forbade treating one student in the same manner as another and condemned any condition which sought to extract the same material from every individual in a particular classroom. He believed that long explanations should be abandoned and that the vital ingredient of self-activity, becoming involved with external stimuli rather than with the memorization of facts, could set the mind into motion. The present open classrooms represent a point of convergence of many views of education.

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sharing one basic tenet: "...that children learn best and most efficiently what they need to know when they are ready to learn it. The readiness of the children, the preparedness of the teacher, the children's own willingness to learn a specific thing at a specific time..."

WHERE IS OPEN EDUCATION NOW? WHERE IS IT HEADED? Vincent R. Rogers, in an article about open education, gives us an answer to where open education is now by stating:

Open schools (in a physical sense) are surely "in"; many, many teachers have moved their furniture around and brought in clay, macrame, and gerbil.is; thousands of teachers have made and are making the pilgrimage to England; our professional literature still abounds with articles dealing with aspects of open education; ...and the idea that children should be treated in more humane and dignified ways has gained some credence.

"Movement in Time and Space" is a film produced by the BBC in London for parents, teachers, educators and anyone interested in open education. The film takes place in Yorkshire, England at a small primary school in a mining town. Rogers states that most people who have seen this film have been quite impressed with the discipline displayed by the children. He also gives his impression of the film by saying:

Experiences like those portrayed in the film are the essence of what British educator John Coxe means when he speaks of "good education" as that education which helps children live both richly and fully as children. The teachers in this Yorkshire school see education as far more than skill development.

There is also in England the Summerhill School, within the village of Leiston, that was founded in 1921. "Summerhill began as an experimental school. It is no longer such. It is now a demonstration school, for it demonstrates that freedom works." One of the main ideas of this school, as told by A. S. Neil, is "to make the school fit the child instead of making the child fit the school." The children at Summerhill understand what they want to learn. The children and teachers are equal, i.e., in rights and responsibilities. Books are not important, but it is believed that the three "R"s, along with sports, theatre, art and freedom are important. A. S. Neil believes that "Creators learn what they want to learn in order to have the tools that their originality and genius demand. We do not know how much creation is killed in the classroom with its emphasis on learning."

One must not be led to believe, however, that open schools dominate the educational system in England, because there are still traditional schools as well as open schools. Likewise, open education has not been accepted by the masses of teachers, schools and educators here in the United States. There are, however, very few in number, some experimental schools that are set up to follow the ideas of open education. One reason why open education has not been put into action by the masses is due partly to the fact that we seem to hesitate in the United States to accept innovations. Another reason is that American teachers usually still maintain the traditional method of teaching the whole class. We cannot bring about change unless we re-examine our fundamental educational beliefs and values, otherwise change seems to be superficial and shortlived.

The philosophy of open education is having a visible influence in the United States, especially in the elementary schools. However, most educators, students, and parents who are involved in the changes are not finding the task to be an easy transition, although they find the results to be well worth the effort. Very few schools have reached an actual state of "openness," perhaps few ever will.

The question of where open education is headed cannot be answered unless we develop ideas, concepts and philosophies to make a smooth transition into this change. We need an educational system that will not be dull, boring or oppressive and will not strain and prosper. How teaching methods will be needed.

Rogers states, "If open education is to grow and flourish in the United States, we must develop a broader alternative testing program so that we can assess the impact of such programs on children." Rogers also believes that the mass media must become involved in the transition to open schools, which will also help the parents in getting local and community support. However, I think that the most important step is for us to make long-range plans, develop these ideas, make judgments concerning failure or success after more than just one year's time, be patient and remember that change does not occur overnight. We must prepare for open education, just as a music teacher must prepare any classroom in music with an individualized program of instruction.

STRUCTURE AND RATIONALE OF THE OPEN CLASSROOM

The basic plan for individualization of instruction, as mentioned earlier, can be done through the use of learning centers in the open classroom type setting. The purpose of a learning center is to teach a child how to learn. A child can, either individually or in a group of other students, choose what he wants to learn, when he wants to learn it, and can take as much time as he needs to successfully complete a given learning. In an open classroom, if structured properly, a child will learn better and faster and be more independent than he would if it was imposed upon him. Many times a child will find activities in a learning center to be fun, so he does not distinguish fun and play from learning, because he is actually doing both at the same time. "We know that play is the sense of 'messing about' with material objects or with other children, and of creating fantasies is vital to children's learning and therefore vital in school."

Interactions in groups tend to prepare a child for social life. From a child's experiences in the learning centers he will soon be able to make generalizations about many things. Learning centers should be structured in such a way that if a child makes mistakes he will not be condemned for them but his mistakes should serve as a learning device, i.e., he can see his mistake, correct it, and then learn how to avoid the type of error in the future.

One might be led to think that the activities in an open classroom are random and not well structured. This is not true because, even though the children are allowed free movement and choice of activity, there is a great deal of structure as a result of the careful planning and the teacher, keeping in mind the needs, wants and selection of materials for the children. Each activity, therefore, must have a goal to be reached by each child.

Although an open classroom may appear to others to be one big chaos of confusion, noise, or lack of control, it is not. There may be considerable noise, and there are different kinds of noise, but the teacher has to realize that it is necessary for the type of error in the future.

Learning can be obstructed more when children are tied down to the same lesson presented to everyone at the same time, and expected to be understood by everyone at the same rate of time. There definitely is structure because the teacher has to be ready to encourage, guide, offer suggestions and lift their spirits when they are feeling discouraged or when they feel they cannot master an activity.

"Structure
should indeed be present, but it will differ from the organizational rigidity of
the traditional classroom, which relies on lock-step schedules, predetermined
learning behaviors and sequences, prescribed content, and exacting achieve
ment tests. 25

Every learner has a learning style. It is the objective of the teacher to
discover the learning style of every student. This is or can be accomplished by
observing the behavior of the learner. Some students can be diagnosed faster than
others. For some students initial diagnosis may be incorrect. This may be
determined by a personal conference with the student. If so, a new diagnosis can
be formulated as a result of the conference. Once the learning style of the
student is established, conditions can be set whereby this particular student will
see the need for learning. 26

"At every stage of learning children need rich and varied materials and
situations, though the pace at which they should be introduced may vary according
to the children. If children are limited in materials, they tend to solve problems
in isolation and fail to see their relevance to other situations..." 27 In order
for an open classroom to function properly, a fairly large classroom with lots of
free space is needed. Usually an open classroom is sectioned off into learning
centers. Each learning center represents a different area in music learning or
merely music enjoyment. Materials in each learning center should be arranged to
provide the students with experimentation, exploration, creativity, and of course,
learning. Furnishing in a learning center is dependent upon the type of activity
to be performed or the learning goal. "There is no single model open classroom."
28 For example, learning centers may or may not require long tables, student desks,
chairs, pencils or papers. The activity of one learning center may require free
movement, lots of space or sitting on the floor.

The music interest center may vary depending upon what interests and needs are
specified by each child. The most common equipment would be the piano, autoharp,
rhythm instruments, melody instruments, record player with headphones, cassette and
reel to reel tape recorder with headphones also.

Some other materials for an open classroom that have been recommended by
authorities 29 are melody instruments, books related to music, puzzles, puppets,
dress-up clothes, drums, simple music text books, individual learning kits, tapes
of various kinds (listening, sing-a-long and so on), pictures, flash cards and
games. Filmstrip projectors designed for individual viewing, television sets and
radios are also good materials for an open classroom. The Off-type instruments
can also be used for many creative activities. Of course, the guitar and recorder
should not be omitted. Another good instrument to have would be an electronic
synthesizer, since many different kinds of sounds can be produced from it. It is,
however, a relatively expensive piece of equipment. Of course, teacher-made
materials are always good and inexpensive.

To get a better idea of how an open classroom in music is set up, I have drawn
an open classroom music lab with various learning centers, which may be found on
the next page. One must keep in mind that a fairly large room is necessary to
allow enough space between each center. The area in the middle has been left: open
for movement. However, when such activities are not taking place, this area may be
used to set up other learning centers.
Keith F. Thompson states that music cannot be locked up into a closet, nor can it be confined to one room. In order for music to take a vital part within a school, it must be isolated in one particular area, but should spread out into the halls, the cafeteria, the gymnasium and the playground. However, this is not to say that a music room is not needed; a music room is necessary in addition to the spread out of the music program. One must remember that there are certain kinds of music experiences that can become a part of the mainstream of life within the classroom. Therefore, space should be provided for both kinds of activities. Individualization calls for reorganization of materials of the entire music program and scheduling must be modified. Teachers and administrators must find new procedures which meet the requirements of learners working by themselves most of the time. Communities must be included in these plans for change. Experts, few in number, yet expensive, can be called in to help also.

**JUSTIFICATION FOR INDIVIDUALIZATION IN THE MUSIC CURRICULUM AND THE GOALS IN LEARNING MUSIC**

There are definitely individual interests, differences, needs, and enthusiasms for music among many children. One way to try to meet these needs and demands is through individualization of instruction in the music program, as well as in other subject areas. Therefore, doesn’t it follow that individualization of instruction will open our eyes to acts and situations that when changed will result in our providing a more relevant music curriculum for elementary children? For example, if one child is really “turned on” to jazz, the teacher should provide a learning center with emphasis on jazz. However, she can not set up this center without including other pertinent music information such as, rhythms, syncopation, form, improvisation. In essence this means that, once a teacher discovers a child’s interest, she must set up a center for that interest, and at the same time take advantage of it to include other pertinent music information contained in that subject matter. It is the child who will grasp it. Hopefully, soon the child will become interested enough to move on to other types of music besides jazz. I think this idea can be well supported by what Ausubel says, “Meaningful learning is defined as the process where the learner is presented with learning tasks that are concretely related to knowledge and experiences that are already a part of the learner’s background.”

On the first goals in learning music through an individualized program of instruction is that each child should understand the music he studies by being able to make of it factual judgments. “Children can think and form concepts so long as they work at their own level, and are not made to feel they are failures.” This begins with the ability to distinguish music as organized sound and silence from unorganized sound. Music must be heard before it can be understood.

A second goal in learning music through an individualized program of instruction is for the teacher to respect a child’s personal opinions, views, or judgment on a particular musical subject. She must be careful not to impose her own opinions upon the children.

A third goal in learning music would be: “Sensitizing students to the sounds and the organizations of those sounds that are part of our environment and our culture.” This is very important, keeping in mind what Ausubel said about meaningful learning. The teacher must provide opportunities and experiences that will allow students to realize that music can be a form of communication used to learn human feelings. Likewise, providing positive experiences in which the students will be confident, is also very important.

Most of the above mentioned goals in learning music could also be included in the structure and rationale of the open classroom in music, as well as the role of the teacher, because they are really very similar, one is dependent upon the other.

**THE ROLE OF THE TEACHER**

The role of the teacher in open education is most important because the success of the student depends upon his understanding each child’s needs and providing for it. She must be able to individualize her teaching behaviors to decide what she must do to make each student’s learning more efficient and more successful.

One of the first things a teacher must do is to get rid of the notion that a student’s age or grade determines what he should learn. She will need to check, through informal tests, or her own observations, what her students already know so she can plan what new material they are ready to learn.

Sister M. Tobias Hagen lists four stages of learning: exposure, perception, recognition, and manipulation as relevant to goals in learning music and the role of the teacher in setting up music in open education. “The identification of the structure of musical knowledge and of the stages of the learning process provide a basis upon which the teacher can structure the open classroom environment with assurance that the learning will be as logical as the student allows it to be.”

In setting up an open classroom in music the teacher should make a list of learning behaviors that would be most productive for her students. This would entail careful thinking and being able to write down precise definitions of the learning behaviors. For example, if the teacher lists “concentrate”, she should describe just what the student has to do to convince her that he is concentrating.

The teacher should even keep a card file of her students, listing the learning methods that seem to be best for each student.

In an open classroom in music another role of the teacher would be that of a resource person rather than an information giver. The teacher must set up learning experiences so that a child will be able to plan his own subject matter. With the teacher serving as a resource person, she intervenes in the learning only when the student desires her help or when it is necessary for her to act as a motivator to bring the students and the subject matter together. Since the teacher is the one who structures the environment for the learner, the control of learning really is not lost, only shifted a bit. Whereas, in the traditional method of teaching, the teacher makes lesson plans for the entire class, in open education, the teacher sets up situations for individuals or small groups to learn particular subject matter. However, this does require more work than the traditional lesson planning because the teacher must plan diverse musical activities and set up many learning tools for individuals and small groups. Therefore, the administration must make allowances for additional planning time and staff help, such as teacher aides. Team teaching may also be a necessity.

The teacher must offer challenging experiences for the students. Although independence in learning is one philosophy in open education, the teacher must constantly have more additional material readily available for the students. This happens when the teacher finishes one assignment early. Perhaps the student found learning to play the recorder was easy, but he has difficulty in playing the flute. Then it is the role of the teacher to have a new task readily available for this student. The teacher will learn what he can learn and what he does not understand. These students may even come back to this activity later when they feel more comfortable about it.

Being able to accept the disinterested student is a difficult task for a teacher. In an open classroom in music. However, some children, no matter what is presented, how it is presented, or when it is presented, will still be “turned off” to music, even though the teacher believes in the idea of music for children. When this happens the teacher should let the child alone. It might be possible that the child has musical experiences outside of the classroom that he prefers over the musical experiences inside of the classroom. Then it would be the responsibility...
of the teacher to find out what that experience is that the student enjoys, set up a learning center for it, and incorporate musical knowledge into it.

Another role of the music teacher would be to encourage the students to work on projects and activities outside of the classroom. For example, if a group of students is studying the opera, the symphony orchestra, or electronic music, then they should be encouraged to attend an appropriate concert or demonstration by one of the above in the community.

All of the above roles of the teacher require two basic elements, time and planning. A teacher of an open classroom can not arrive at school with the children and leave with them and expect her open classroom to be successful. Many long hours of planning and concentrated effort and thought are necessary.

The last role of the teacher is to have progress reports through evaluation. The purpose of an evaluation is to ascertain the strength and weaknesses, to diagnose deficiencies and to chart procedures toward subsequent improvement. The teacher should set up a periodic check-up system. For example, she may include in her student progress reports such questions: "What has the student accomplished?" He floundering, or is this task so easy he does not need to exert learning effort? Is he protected by a check-back system from forgetting something he once knew? To properly evaluate each child, the music teacher will also need to design teacher made tests that relate to the learning centers that each student has been involved with. Therefore, in setting up a learning center, the music teacher must also keep in mind what information could be used later on teacher made tests, to evaluate each student's understanding and knowledge included in a particular center.

The next few pages will deal with specific ideas for learning centers and activities that a teacher may incorporate into her open classroom in music, however, keeping in mind that she must set them up depending upon the needs and wants of her particular students.

IDEAS FOR LEARNING CENTERS AND ACTIVITIES
IN AN OPEN CLASSROOM IN MUSIC EDUCATION

Topic: "Listening Center"

Materials: Record player, tape recorders, headphones, records, cassettes, student desks or tables, chairs, pencils, and listening guides.

Objectives: The students will be able to listen to different recordings, classical as well as pop music and be able to discriminate between certain sounds, the rhythmic aspect, the form of the music, and other detailed information portrayed in each recording.

Procedures: Each student should be provided with a listening guide and a tape recording of the music, read the guide, listen to the questions, also included on the tape, and proceed to answer the questions, or perform other musical tasks.

Topic: "Electronic Music Center"

Materials: Reel to reel tape recorders, headphones, record players, a synthesizer, reference materials, desks or tables, pencils and papers.

Objectives: The objectives are to introduce the child to electronic music and the synthesizer, to learn how to perform and compose simple electronic music compositions. However, there may be more advanced electronic music centers, depending upon the knowledge of the teacher on the subject, and the progress of her students.

Procedures: The procedures would depend upon how the teacher has set up the center, and what tasks are to be performed, and the learning goals involved.

Topic: "Instrument Construction Center"

Materials: The materials needed will range from hammers to empty oatmeal boxes, depending upon the types of instruments to be made.

Objectives: The objectives are to learn how to make simple music instruments from common everyday or household items, and to see how sound instruments can be made from lots of different objects.

Procedures: The procedures will be dependent upon the type of instruments to be made, such as tom toms made from oatmeal boxes or tambourines, made from paper plates. Books and ideas are available.

Topic: "History of Music Instruments"

Materials: Student desks or tables, chairs, textbooks, reference materials, flashcards, pictures, pencils, and papers.

Objectives: The child will acquire some knowledge about the history of musical instruments, and will be able to trace the history of various instruments.

Procedures: Give each child one or two instruments and have him trace its history and be ready to give an oral report to the class.

Topic: "Programmed Learning Packets"

Materials: Programmed learning materials, student desks or tables, books, pencils and papers.

Procedures: The procedures will be explained in the learning packets, which are available commercially.

Topic: "Instrument Instruction Center"

Materials: Student desks or tables, chairs, music stands, music, piano, recorders, autoharp, and guitars.

Objectives: The child will learn through written instruction how to play one of the above instruments.

Procedures: Each child should be given appropriate materials for the instrument he is going to learn to play. He should proceed step by step.

Topic: "Create a New Product for the Market and Compose a Song for It for Television and Radio Commercials"

Materials: Student desks or tables, chairs, art supplies, staff paper, melody instruments.
Objectives: The child should use his musical knowledge or own creativity to design a new product and compose a song for it. The child can see how music is used for solving of object.

Procedures: Given art supplies, the child should first create his new product, and then compose a song for television and radio commercials.

Topic: "Complete a Music Story"

Materials: Student desks or tables, music stories, staff paper, melody instruments, paper and pencils.

Objectives: The child will become exposed to the necessary preparations required for realizing operas, operettas, or musical plays and skits. He will use his creativity to finish the story, design costumes, suggest performance, and compose music for it.

Topic: "Create a Musical Puppet Show"

Materials: Puppet material, desks or tables, melody instruments, staff paper, books, reference materials.

Objectives: The child will use his creativity to compose the music and create the story.

Procedures: The child should write the puppet story, then compose music for the performance. He should select other classmates to help with the scenery, costumes and performance itself.

Topic: "Making Musical Slides"

Materials: Materials needed for making slides (sources available), melody instruments, staff paper, slide projector.

Objectives and Procedures: The child will learn how to make slides and then compose music for the slides. He may make a presentation to the class.

Topic: "Two Part Singing"

Materials: Desks or tables, record player, tape recorders, headstones, song material.

Objectives: The student will learn how to sing music with two parts.

Procedures: Sing along with the tape the soprano part of a two-part song. Second, sing the soprano part while the tape sings the alto part. Third, sing the alto part along with the tape recorder. Fourth, sing the alto part while the tape recorder sings the soprano part.

CONCLUSION

The April 1974 edition of the Music Educators Journal contains an article that gives four case studies of schools that have changed to open education. In reading each case study, the author discovered that the degree to which music integrated into the open classroom varied from one school to another, depending upon each school's philosophy, the stage of development and the personnel involved. Another fact discovered in comparing the four case studies was that in an open school there is no certain way that a music program can or should operate. Let us take a brief look at those studies to get a better idea of the differences.

At the Campus Laboratory School in Cortland, New York, math and reading were allotted a certain time each day for one and one-half hours. After that time each child could choose what he wanted to study. Although the classes were thirty-five minutes long, a child could stay as long as he wanted. The school was divided into early childhood, primary and intermediate children. Music classes sometimes had children from all three grade levels.

In Los Angeles the Grape Street Elementary School has students of different ages grouped together. Music is a common denominator, that helps their teachers in their work with the cognitive, the affective and psychomotor domains. Their music program is flexible, yet structured so that reading, math, social studies, physical education and other subjects are taught through music. So the children learn to listen to music, as well as enjoy it.

The music program at Ollive School in Arlington Heights, Illinois, has three basic goals that are followed through in the music program: "...to develop in each child the highest possible degree of independence with music; and to develop in each child a good feeling about himself and about music." In this school the children go to music together as a class for two half hour periods a week. They all are working toward a common goal, but through different activities.

In Cambridge, Massachusetts, at the Shady Hill School, children five, six and seven years of age are grouped together in music classes which meet twice a week. There are two music rooms, one large enough for movement, the other for singing. The goal of this music program is to give the children a firm foundation in singing and to help them find a beginning awareness in the development of movement and dance.

Each of the four schools above have been successful in implementing their music programs through open education, and they are not the only ones that have found success. Because they have been successful in their individual methods and structures the author thinks that schools or school districts should begin to think about the idea of changing to open education because it is in open education that the child can decide what he wants to learn, with the teacher setting up learning goals to meet the child's particular interests and needs. Also, a child learns best what he is interested in. Although an activity may be fun or seem like play to a child in open education, if structured and organized properly, the child will be learning at the same time. However, the author is not implying that this is the only correct method to use in teaching. There is no one ideal method of teaching, but open education through individualization can be one answer.

In the author's own teaching using the traditional method, presenting material to classes of children, all at the same time, the author has discovered that sometimes children are bored with a certain lesson and subsequently refuse to listen, but cause disturbances, while others enjoy the lesson but have a hard time understanding everything because of the disturbances around them. In trying to solve some of these problems the author began to use some of the ideas of open education. One day a week is set aside for what one might call center time, or game time, when the children are broken up into groups, with each group involved in a different activity.
Some of the activities are actually games, however, they are constructed in such a manner that the children receive enjoyment from it and are learning at the same time. If there was in the author's school an open classroom in music, a child would not have to waste his time doing things that do not interest him, especially when he can learn so many things about music in doing the things he does enjoy. Through individualization of instruction a child will learn to use his time wisely, doing the things he likes and will learn from them.

By changing to a music program or open education, even if the entire school is not an open school, the author thinks the music teacher would have fewer behavior problems than are present in many music classes which are being taught in the traditional way. When a child is learning by doing things he enjoys he does not have time or interest in participating in undesirable behavior.

From observation of student interests and behaviors in the author's own class, the author thinks an open classroom in music could be one of the solutions to the problems that the author is faced with. If given the necessary funding, space allocations and time to fully prepare and organize ideas, the author would definitely consider changing to an individualized program of music through open education. However, this task would be impossible without the assistance of other faculty members, the principal, the school district's administrative staff, the community, and help from professional people. Likewise, the author would need aides to assist in giving help to the children and also allow enough planning time, and time to relate the children's individual needs and wants. We, as teachers, must begin now to prepare for teaching the individual child, not classes of children, because children, like adults, are individual in their interests and wants.

The author would like to end with a poem by Kahlil Gibran which reads:

Your children are not your children.
They are the sons and daughters of Life's longing for itself.
They come through you but not from you.
And though they are with you yet they belong not to you.
You may give them your love but not your thoughts.
For they have their own thoughts.
You may house their bodies but not their souls,
For their souls dwell in the house of tomorrow, which you cannot visit, even your dreams.
You may strive to be like them, but seek not to make them like you.
For life goes not backward nor tarries with yesterday.
You are the bows from which your children as living arrows are sent forth.

Let your bending in the archer's hand be for gladness.

FOOTNOTES


3. Ibid.


5. Ibid., p. 177.

6. Ibid., p. 178.

7. Taken from class notes, Music Seminar 561 at Washington University, from oral paper given on the "Stages of Jean Plaget", October 14, 1975.


15. Ibid., p. 20.

16. Ibid., p. 20.


18. Ibid., p. 4.

19. Ibid., p. 20.

20. Ibid., p. 27.


23. Barth, Roland S., "'First We Start With Some Different Assumptions'", Music Educators Journal, April 1974, Vol. 60, No. 8, p. 36.


31. Taken from class notes, Music Seminar 561 at Washington University, from oral paper on David Ausubel, October 7, 1975.

32. Barth, Roland S., "'First We Start With Some Different Assumptions'", Music Educators Journal, April 1974, Vol. 60, No. 8, p. 36.

33. Even aleatory music is organized, but it is random.


42. Rathbone, Charles H., "The Role Of The Teacher In Open Education", Music Educators Journal, April 1974, Vol. 60, No. 8, p. 57.

43. Ibid, p. 52.

44. Ibid, p. 54.

45. Ibid, p. 54.

46. Ibid, p. 55.


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A STUDY OF PLACEMENT, PROFICIENCY, AND COMPETENCY EVALUATION OF STUDENT ACHIEVEMENT IN MUSIC HISTORY AND MUSIC THEORY IN MISSOURI INSTITUTIONS OF HIGHER EDUCATION

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Introduction

The last 25 years have seen concerted activity in the identification and accommodation of individual differences in higher education. Testing programs administered by agencies such as Educational Testing Service (ETS) and American College Testing Program (ACT) have achieved prestige and widespread acceptance by colleges and professional schools. Many institutions have developed their own tools of measurement, which they administer independently or in parallel with nationally standardized instruments in order to present an accurate and complete picture of student achievement. These testing programs have served any number of purposes, including admissions screening, diagnosis of deficiencies, advanced or remedial placement, granting of college credit, allocation of financial aid, and demonstration of student competency at intermediate checkpoints in a program and/or before graduation. In his recent book College Placement and Examinations, Willingham (1974) describes 12 different treatment models for the accommodation of individual differences discovered through testing. A well-designed testing program can perform many functions, contributing a fund of objective data upon which to base student counseling decisions.

In the field of music education, new approaches to the teaching of music history and music theory have been proposed and the critique of traditional teaching practices contained in documents of the Yale seminar (Pallis, 1964) and the Northwestern conference on comprehensive musicianship (Music Educators National Conference, 1965) has stimulated interest in the measurement of student achievement in music history and music theory. Beginning with the Graduate Record Examination Advanced Test: Music (Educational Testing Service, 1957), ETS has developed five nationally standardized instruments which give some attention to assessing student achievement in music history and music theory. A, Telleris (1954) has published a test of listening skills designed for the college entrance level, while Alleris and Stecklein (1962) have developed a similar measure intended for the college midpoint level. The same authors have constructed and normed the Alleris-Stecklein Senior Comprehensive-Basic Entrance Battery (1966), a graduate level measure which is currently unpublished. Recent studies by Schleuter (1975) and Dvorak (1975) have demonstrated the practicability of using listening tests originally developed for younger students as a tool in the counseling of college music majors.

University music departments have secured their own instruments of measurement tailored to fit institutional needs for student assessment. Since 1957 the University of Illinois has employed its own tests in the counseling of incoming graduates in music education, using instruments in music history and analysis developed by Pallis (1957) and more recently by LeBlanc (1973). Like many other institutional testing programs, the one at Illinois employs both formal and informal tools of measurement.

What is the general status of placement, proficiency, and competency testing of college music students in 1975? This question can hardly be answered by observing the usage of ETS tests, the sales of published measures, or the occasional article which is published about the subject. During the fall of 1975...
the authors conducted a study attempting to shed some light on student assessment programs currently in operation. Because a national survey would have called for resources beyond those available, the assumption was made that Missouri is reasonably typical of other states and that an exposition of its placement, proficiency, and competency evaluation practices would at least be an indication of practices being followed elsewhere. With the population defined as institutions offering a music major within the state of Missouri, the survey took on more manageable scope and hopefully attained a high enough rate of response to assure validity. Missouri music educators have shown interest in previous surveys of the teaching of music history and music theory, as evidenced in published reports by Karel (1954) and by Wurtz (1964). In response to the interest that was disclosed by these surveys, Lewis Milton and Len Karel developed a proposal to secure funding for the development, trial, and validation of competency tests for use in music teacher training institutions in Missouri. Unfortunately, the necessary funding was not available.

Objective of the Study

The objective of this study was to describe accurately the placement, proficiency, and competency evaluation (PCE) of student achievement in music history and music theory in Missouri institutions of higher education which offer a major in music. This objective was approached by systematically posing two questions: (1) What is the general basis for making PCE decisions regarding the music history and music theory achievement of college music majors? (2) What are the general characteristics of assessment tools used for PCE?

Definitions and Limitations

For the purposes of this study, 'placement evaluation' is defined as the assessment of student achievement for the purpose of assigning the student to an educational treatment commensurate with his needs and abilities. 'Proficiency evaluation' is a similar assessment carried out to exempt the student from course work in areas where he is already proficient. Academic credit can sometimes be earned through proficiency examination. 'Competency evaluation' is done to determine whether or not the student can demonstrate certain minimum competencies required at established checkpoints in the program and/or for graduation. It follows that a well designed instrument of measurement could do service in more than one of these areas of evaluation.

This study was limited to PCE practices in music history and music theory exclusive of course grades. All levels of music major evaluation were studied, from beginning undergraduate through advanced graduate. The study was limited to Missouri institutions of higher education which offer a major in music.

Method

The study employed a two page mail questionnaire which is reproduced here as Appendix A. The questionnaire was informally pilot tested before use and retested in response-determined branching in an effort to avoid redundancy and unnecessary demands upon respondents' time. Questionnaires were addressed to the head of the music department by name when possible, and a brief cover letter explained the purpose of the study. The department head was asked to send the questionnaire to the most appropriate staff member(s). The cover letter set a specific deadline for responding, and two consecutive follow-up mailings were sent to institutions which failed to respond. A new and appropriate cover letter was used for each follow-up, and all mailings included a copy of the questionnaire and a postpaid reply envelope.

Although it was easy to define the target population, the actual identification of which institutions to contact proved quite difficult. Three sources were pooled in an effort to pinpoint institutions and name department heads: the most recent directories of the College Music Society (1959), the Missouri Music Educators Association (1973), and the National Association of Schools of Music (1973). The criterion for inclusion of an institution was its offering of a major in music, and the College Music Society publication was taken as authoritative on this.

Information published in the College Music Society directory indicated that 30 institutions of higher education in Missouri offered a major in music. The decision was made to include two-year institutions offering an associate's certificate in music. A review of the other directories and word-of-mouth investigation added three schools to the list, so a total of 33 institutions was contacted for the survey. After two follow-ups, 26 institutions responded, but one of these had dropped its major in music and its response was removed from the analysis. It was also removed from the population, and the resulting response ratio was 25/32, or 78.1%. While this fell short of Kerlinger's (1965) criterion of 80%, it compared favorably with the 54.4% and 61.9% response rates reported by Wurtz and by Karel respectively.

The following Missouri institutions cooperated by responding to the survey questionnaires: Central Methodist College, Central Missouri State University, Columbia College, Drury College, Evangel College, Florissant Valley College, Fontbonne College, Hannibal LaGrange College, The Lindenwood Colleges, Maryville College, Missouri Southern State College, Missouri Western State College, Northeast Missouri State University, Northwest Missouri State University, St. Louis University, School of the Ozarks, Southeast Missouri State University, Southwest Missouri State University, Tarkio College, University of Missouri--Columbia, University of Missouri--Kansas City, University of Missouri--St. Louis, Washington University, William Jewell College, and William Woods College.

The investigators considered various criteria which might be used to classify responding institutions, such as membership in the National Association of Schools of Music (NASM) or the National Council for the Accreditation of Teacher Education (NCATE), or the number of music majors or overall enrollment of the institution. After a review of responses it was decided that classification would not be of great help for identifying trends in a group of this size. The data was therefore analyzed as coming from a single group of respondents, with the following results:

- Item 1 asked if entering undergraduates were examined in music history, and none of the institutions reported such testing.
- Item 2 posed the same question about music theory, with 50% of the sample responding that they test entering undergraduates in music theory. All of the schools which test do so for placement purposes, while 13% of this group tests for graduate placement.
- Item 3 inquired whether or not entering transfer students (at any level) were tested in music history. This testing is conducted in 24% of the responding schools, with all of these institutions testing for placement and 17% for admission. In contrast to this, Item 4 revealed that 68% of the responding colleges tested entering transfer students in music theory. All of these colleges tested for placement, while 18% tested for admission. In total, 20% of all respondents reported testing undergraduates in music history, while 17% tested for admission.
- Items 5 and 6 dealt with graduate programs, and response percentages are reported in terms of the eight institutions which reported graduate programs in music. Responding to Item 5, half of the institutions said that they test entering graduate students, while all of these tested for placement, while none tested for admission. Item 6 asked the same question about music theory,
with 62.5% of the schools testing in this area. All of this group tested for placement, while 60% tested for admission.

Up to this point, the questionnaire had focused upon testing carried out at various entrance points in a student's program. Item 7 was a blanket question asking respondents to indicate any other points at which placement was conducted in music history and music theory, excluding testing carried out as part of a course. The question revealed that only 12% of the responding institutions did placement testing at any time other than the entry points of student progress. Of this group, 67% allowed for advanced placement or proficiency testing in music history or theory at the student's initiative. Comprehensive examinations in music history were administered one or two semesters before a student's graduation by 33% of the group.

Item 8 was designed to inquire into the broad range of competency assessment that is possible outside of an admission, placement, and proficiency testing program. Some form of competency assessment was reported by 26% of the responding colleges. These respondents employed classic assessment devices in music, such as keyboard and sight-singing tasks, oral examinations, performance tests, and recitals. Student performance was often related to objective criteria, and the performances were sometimes judged by a panel rather than an individual. Successful performance on the competency assessment was usually a prerequisite for advancement in a degree program. The open-ended nature of the question prevented these responses from being quantified by percentage.

Item 9 asked if achievement standards in music history and music theory were the same for all kinds of music major. Uniform standards were reported by 72% of the respondents. The 28% enforcing different standards generally required higher achievement in music history or theory from students who were history or theory majors, and permitted lower achievement from students enrolled in a liberal arts music major. Unfortunately, some of the schools with different standards did not elaborate on the nature of their differences.

Item 10 sought to identify the usage of specific forms of measurement. Evaluating student achievement in music history and theory. It also asked respondents to indicate when music listening was the basis for measurement. Objective tests were used by 58% of the group, and 42% of those using objective tests based the tests upon music listening. Essay tests were used by 24% of the schools, and 17% of the essay test users based their tests upon music listening. Oral tests or structured interviews were employed by 40% of the colleges, and 30% of these users based their measures upon music listening. Unstructured interviews were relied upon by 24% of the institutions, and 17% of these users based their interviews on music listening. Only 42 reported using other forms of measurement, and in this case students were required to submit an original composition. It should be noted that responses to Item 10 are not mutually exclusive. Some institutions reported using more than one of these forms of measurement.

Item 11 was a blanket inquiry designed to elicit information about the nature and use of specific tests. The Graduate Record Examination was used by 12% of the institutions, while 46 reported use of the SAT or ACT. It was impossible to determine from the responses whether the general academic or the advanced music section, or both, were used. These were the only published tests reported to be in use. Locally developed graduate examinations were used by 12% of the schools, while 20% used locally developed examinations at the undergraduate level.

Item 12 was intended to be a clear-cut question asking whether or not respondents would use good quality tests developed outside their own institution if such tests were available. Instead of answering with "yes" or "no", the respondents qualified their answers. The investigators interpreted the responses as 40% "yes", 44% "maybe", and 16% "no". Responses to each item are summarized on the sample questionnaire reproduced as Appendix A.

Discussion

The study revealed several general patterns of evaluation. Judging from this study's results, institutions with graduate programs are more likely than others to conduct evaluation beyond that of regular course work. These evaluations are often in objective form and based upon listening stimuli. Schools with graduate programs are also more likely than others to evaluate transfer students at any level. Larger institutions in general seem to do more testing than others. Many more institutions test for placement than for admission. Music theory receives considerably more evaluative attention than music history.

The underlying reasons for these patterns of evaluation are open to speculation. A large graduate institution may be more motivated to evaluate its students because of the potentially longer association it may have with them from freshman year through graduate degree. Its faculty, responsible for a large student body, may need objective data on student records to compensate for the personal contact between faculty and student that is often lost in a large institution.

A more detailed study is needed before any judgment can be made of the adequacy of locally developed instruments or the overall quality of institutional testing programs. This study was based entirely upon self-report, and gave no basis for undertaking judgments of quality.

If questionnaire responses are correct, many respondents were either unfamiliar with available standardized tests or had considered and rejected them for use at their own institutions. The study suggests the existence of a market for good published tests in music history and music theory.

The questionnaire used in this study could now be revised with some profit, but it is doubtful that responses could be very much improved with questionnaire revision. The main problem encountered was one of inadequate diligence on the part of some respondents. The diversity of practice in the field called for some open-ended questions, and some respondents were not conscientious about giving a complete and clear answer.

There is no lack of research opportunity for those who wish to explore this area. This study was small-scale and preliminary in view of the questions which remain to be answered. A study similar to this could be conducted on a national scale, and future studies could extend the line of questioning beyond what was done here. Two areas of logical extension would be the investigation of what is done to accommodate individual differences disclosed by PPCEQ, and an inquiry into what resources are needed beyond those already available to assist in making PPCEQ decisions. Hopefully this study has answered a few questions, and the institutions which responded deserve credit for doing so.

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### Appendix A

Survey of Placement, Proficiency, and Competency Evaluation in Music History and Music Theory

<table>
<thead>
<tr>
<th>Institution</th>
<th>Approximate Enrollment of Undergraduate Music Majors</th>
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</table>

<table>
<thead>
<tr>
<th>Approximate Enrollment of Graduate Music Majors</th>
<th>Approximate Enrollment of Entire Institution</th>
</tr>
</thead>
<tbody>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

Note—This questionnaire is intended to cover both music history and music theory. It pertains only to assessments that are made outside of regular course work. Please respond with the symbols + = yes and 0 = no.

1. Do you examine entering undergraduates in music history? 0
   If so, do you examine to determine: admission? 0
   placement? 0

2. Do you examine entering undergraduates in music theory? 60%
   If so, do you examine to determine: admission? 132%
   placement? 002%

3. Do you examine entering transfer students (at any level) in music history? 24%
   If so, do you examine to determine: admission? 172%
   placement? 000%

4. Do you examine entering transfer students (at any level) in music theory? 68%
   If so, do you examine to determine: admission? 188%
   placement? 000%

5. Do you examine entering graduates in music history? 50%
   If so, do you examine to determine: admission? 507%
   placement? 000%

6. Do you examine entering graduates in music theory? 62.5%
   If so, do you examine to determine: admission? 602%
   placement? 000%

7. Questions 1 through 6 dealt with examination of entering undergraduates, transfer students, and graduates. Are there any other points at which placement examination is conducted in music history and music theory? 12%
   If yes, please explain or the back of this page. (This question does not apply to examinations conducted within a course.)

8. Competency assessments are sometimes made to determine whether or not a student is qualified for admission to student teaching, for graduation, or for advancement within a degree program. Competency assessments can include comprehensive or qualifying examinations (oral or written), lecture recitations or demonstrations, major papers, etc. Do you make competency assessments (other than course grades) in music history and music theory? 142%. If yes, please use the back of this page to explain the kind of assessment (test vs. paper, etc.), the subject matter (history vs. theory), and the kind of advancement (student teaching vs. acceptance as doctoral candidate, etc.) that depends upon the student's performance.

9. Are achievement standards in music history and music theory the same for all kinds of music major? 721% (liberal arts vs. music education vs. professional music). If not, please explain the differences on the back of this page.

10. Which of the following forms of measurement are used to evaluate achievement in music history and music theory outside of regular course work? (Respond in the spaces on the left.)
    - 563% objective test 438%
    - 77% essay test 173%
    - 50% oral test or structured interview 302%
    - 24% unstructured interview 172%
    - 8% other (Please explain.) 0

   If any of the forms of measurement in question 10 are based upon music listening, please indicate by putting an 'L' on the second (right) response line.

11. If tests of any kind are used for placement, proficiency, or competency evaluation, please explain their use in detail. On a separate page or on the back of this one, please state briefly the name of the test, a description of its content, the level of student it is administered to, and the purpose of administration.

12. If good quality tests developed outside your institution were available, would you use them for placement, proficiency, or competency evaluation? 50% yes 14% maybe 16% no.

May we have your name, please?

Please return the completed questionnaire to:
Albert LeBlanc, 403 Cannonbury Drive, Webster Groves, Missouri 63119.
An envelope has been provided.

Note. The numbers entered in response blanks indicate the percentage of "yes" answers. Percentages followed by "L" are based upon the number of institutions responding "Yes" to the main question.

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A MATRIX FOR INSTRUMENTAL COMPETENCIES

James A. Middleton
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What are the generative factors which produce competent, skilled instrumental performers? Millions of dollars are spent annually in the developmental processes in learning to play a wind instrument. Instruments are costly, but a greater expenditure involves the cost of instructing instrumental students in elementary junior high, or middle schools, in high schools and universities as well as students of all ages in private studios.

Even if the essential components in instruction are known, have these elements been utilized in teaching strategies at the optimal level? Are there factors in teaching instrumental musicians which have been overlooked or forgotten in the conventional pattern of instruction?

These questions and others of related genre served as a catalyst for experimental research conducted in three school systems separated thirty miles geographically and identified by variable sociological conditions. One school serves a suburban city, the second a university city, and the third a city centered in a predominately agricultural environment.

The purpose of this research was to assess the effect of a teaching procedure referred to as the Breath Impulse technique. This system had been used in various school situations but not under controlled laboratory conditions. The three school districts as described provided the opportunity to assess the technique under controlled conditions.

DESCRIPTION OF THE BREATH IMPULSE TECHNIQUE

Although the technique may seem new or unorthodox, essentially it is neither. The breath impulse technique is merely the accentuation of the beat or beat subdivision by an added force of the breath. For instance, a whole note of four beats duration would be sustained four full counts but with a breath accent occurring on each beat or each subdivision of the beat. Ex. (1) or (3)

The ability to do this is in-born -- every person can regulate the speed of the inhalation process, and this has ever been a human capacity. Too, this type of breath accent is quite commonly used by the finest wind musicians as a component of a professional-sounding tone quality -- the diaphragm vibrato.

If this prior paragraph has established both orthodoxy and lack of newness, why hasn't the technique been more widespread? The vibrato has characteristically been limited in our expectations as an embellishment reserved only for the adult professional musician. Few teachers have realized the innate values of this "adult" embellishment as a valid teaching strategy for the young or inexperienced performer.

EFFECTS OF THE BREATH IMPULSE TECHNIQUE

The terminology "breath impulse" appears to be more useful in the classroom than the term "diaphragm vibrato". Inexperienced wind players understand the breath accent or impulse much more readily, even though there are synonymous relationships.

Rhythm. The most immediate effect of the technique is on rhythm. If the student both counts and plays the musical exercises with a distinct accent on the beat and the subdivisions, internalization of rhythmic concepts is accelerated and constantly reinforced. Sequential development of breath control in accents should progress from one or two per count, up through three, four, and finally six impulses per count. Thus mos., if not all, rhythmic patterns can be measured by the student. This "breath measuring" of note values results not only in cognitive awareness of pitch but in a subconscious involvement in a highly substantive manner.

Tone Quality. This technique has a salutary effect on tone production. Impulsing activates the entire breath mechanism thus insuring complete breath support. The value of total breath support: in performance on a wind instrument is evident, assuring a tonal vitality and sustained control. Students on instruments usually played with a vibrato experience an earlier, more rapid progress toward the goal of a professional tone quality.

Intonation. Full breath support enhances the ability to play any wind instrument at the proper pitch with more accurate intonation. An instrument built to accommodate a supported stream of air will respond more adequately to a performer using complete breath support. Other musical factors may receive tangential reinforcement as well, but these three -- rhythm, tone quality, and intonation are fundamental requisites of acceptable performance.

PROCEDURE

At the three selected sites for the experiment, classes were matched on a socio-economic basis. In each school, one class was taught with the breath impulse technique and the other class was taught with customary procedures which excluded the technique. These classes were beginning band students with instruction beginning in September with evaluation occurring the following April. At each site, the experimental and control groups were taught by the same teacher using the same text and the same educational environment except for the breath impulse technique. The experimental and control groups were selected randomly without bias at each site.

After seven months of instruction, the students were tape recorded on a performance test in five categories: (1) intonation, (2) tone quality, (3) rhythmic reading, (4) sight singing, (5) sight reading with instrument.

Seven judges, professional musicians, evaluated the taped performances using a semantic differential adapted with a modified Likert scale to provide rating indices.

The specific hypotheses were based on the assumption that students taught with the breath impulse technique would demonstrate superior performance skills in each of the five areas: intonation, tone quality, rhythmic reading, sight singing, and sight reading with an instrument.

The design for hypothesis evaluation used is indicated by the following paradigm:

\[
\begin{array}{ccc}
X & Y & Z \\
1 & 1 & 1 \\
\end{array}
\] (Experimental)

\[
\begin{array}{ccc}
X & Y & Z \\
2 & 2 & 2 \\
\end{array}
\] (Control)

(X, Y, and Z simply stand for three groups in each category.)

BEST COPY AVAILABLE
The R indicates that the groups have been randomly assigned as either an experimental or a control group. The research design enables the study to be multivariate, testing several hypotheses, as well as being statistically verifiable and probabilistically relevant.

Because of unequal N's, (subject rated) random sampling from the control group was exercised to gain an equal number of subjects in the control and experimental groups from each school site. Subjects were paired in each of the five concept areas by ranking each sample from low to high, then separately pairing each subject with the respective rank for each concept from the opposite group. This manner the lowest score in the experimental group was matched with the lowest score in the control group, the next lowest in the experimental with the next lowest in the control group, and so on through the complete ranking order. This balancing of experimental with control group N left a total of eighty-four N, divided equally into forty-two experimental and forty-two control subjects.

The establishment of the reliability and significance index by the assessment procedures was followed with a test for the significant differences between the experimental and control groups for each concept. This was conducted by using the t test for dependent measure under the following formula:

\[
\frac{\sum d^2}{N} - \frac{d^2}{N(N-1)}
\]

In setting up the data for the t test for significant differences, scores for each of the experimental and control groups were sequentially ordered and then paired by rank from low to high. The control scores were subtracted from each experimental score and the result was a D (difference) score for each pairing. These D scores were summed in the first column, then later squared as shown in column two, and the \( t \) formula was applied.

TABLE 1

<table>
<thead>
<tr>
<th>Concept</th>
<th>D</th>
<th>( d^2 )</th>
<th>t</th>
<th>( p )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intonation</td>
<td>132c</td>
<td>160558</td>
<td>3.788</td>
<td>.0005</td>
</tr>
<tr>
<td>Tone Quality</td>
<td>179c</td>
<td>168265</td>
<td>5.842</td>
<td>.0005</td>
</tr>
<tr>
<td>Rhythm</td>
<td>300c</td>
<td>475871</td>
<td>10.129</td>
<td>.0005</td>
</tr>
<tr>
<td>Sight Singing</td>
<td>181c</td>
<td>122219</td>
<td>8.624</td>
<td>.0005</td>
</tr>
<tr>
<td>Sight Reading</td>
<td>253c</td>
<td>251125</td>
<td>8.927</td>
<td>.0005</td>
</tr>
</tbody>
</table>

The differences indicated in Table 1 were all significant at or above the .0005 level of significance. This was an indication that the breath impulse method was significantly a better method for achieving these five conceptual qualities in music performance than was the traditional method which excluded breath impulse.

The fact that students with only seven months of beginning band instruction developed significant differences in performance skills in all five areas appears to validate the value of the breath impulse teaching technique. Based on the scores provided by the seven judges in the assessment of performing skills, the combined experimental groups measured significantly better than the combined control groups in all five performing categories. From the most significant difference to the least, the categories of performance scored in this order: rhythm, sight reading, sight singing, tone quality, and least, but still significant, intonation. On the basis of measurement data of these five essential performing skills, it may be safe to assume that the use of the breath impulse technique in the early stages of instruction enables wind instrument players to perform with a greater degree of maturity and accuracy than those who are taught by methods which exclude the breath impulse technique.

FOOTNOTE


Suggested Additional Reading


Dissertation

RESEARCH IN MUSIC EDUCATION WITH YOUNG CHILDREN

Marilyn P. Zimmerman
Illinois University

(Dr. Zimmerman has been a visiting professor at Washington University)

In any discussion of early childhood music education two questions have to be answered: (1) the developmental needs of the child; and (2) the cultural demands, including educational objectives, of the society in which he lives. The developmental levels will aid our understanding of what he can best learn at a given stage, and the societal demands will prescribe curriculum.

The purpose of this paper is to summarize recent research on the musical development of young children and to indicate the implications of these selected research findings for music education in early childhood.

According to the developmental viewpoint, an individual is engaged in a continuous process of creative interaction with his environment. The adaptive processes of assimilation and accommodation form the opposite poles within which this interaction is structured. These invariant functions continually disrupt the equilibrium of thought and force the individual to restructure his thinking at he simultaneously assimilates the environment to himself and accommodates himself to the environment. Each new assimilation and accommodation leads to a higher level and more stable point of equilibrium until a cohesive and coherent system of thinking is developed.

Within this setting Piaget has described an elegant theory of cognitive growth through which human intelligence is moving successively higher stages from pre-operational (sensorimotor) to formal operational (abstract) thinking. The order of stages is both organic and experiential -- organic because they unfold systematically and experientially because they transcend specific thought patterns. In the initial stages of thinking, for example, the infant shows signs of recognizing family members by their voices. The child learns to hear, and begins to differentiate his own vocal sounds and is imitating the aural images and impressions from his sound environment. The infant derives pleasure from this type of activity and so tends to prolong it.

Two interesting studies have been conducted with twelve pairs of same-sex twins matched in age and sex with an equal number of singletons. The first study by Simons (1964) observed these infants, ages 9.2 months to 31.4 months, when exposed to various types of music. The twins were less responsive than the singletons. A difference in the twins' responses while the older singletons were already more responsive than the younger singletons in vocalizing, the pitch interval that occurred most frequently was that of a major second.

Alford, in a follow-up study (reported in 1971) with the same children at the ages of 22-44 months, found that age level influenced the emergence and development of music responses. However, the combined aggregate scores of the twin pairs were significantly lower than those of singleton pairs for three consecutive years.

In a pilot study which the author conducted with infants ranging from thirty-six months and using the observational techniques developed by Simons and Alford, body and facial responses to orchestral and choral music occurred more readily among the age group than among others. A significant change in the number of initiations occurred in the course of the study.

At the Third International Seminar on Research in Music Education, Thackray posed the question concerning the role of the home environment in the musical development of young children. Two studies have shown this relationship to be statistically significant. Kirkpatrick (1952) and Shelton (1965) have shown strong relationships between singing ability and the musical environment. Shelton's research also indicated that the home environment contributes significantly to rhythmic movement, response to contracting tempi and moods, and discrimination of pitches and melodic direction.

Hill (1968) conducted a study with 752 (kindergarten-first) and (fourth-sixth) grade children representing culturally deprived and culturally advantaged children. A Primary Music Skills Test was given to K-I and the Gordon Musical Ability Profile to the fourth-sixth graders. The advantaged performed consistently better than did the deprived. The gap between the two groups did not change at a significant rate although the mean scores for the Gordon test revealed a slight but consistent increase in the gap through grades 4-6. A plateau seemed to be reached at about the fifth-grade level.

Of singular importance in developmental theory is the concept of maturation. Maturation can be defined as the interaction of developmental factors within the individual. Instruction to be effective, the child must be at a level of maturity that allows him to assimilate it. Although instruction cannot transcend maturation, it does tend to modify the results of instruction. Instruction may be quite unaesthetic before a certain level of maturation is reached. These statements do not negate the importance of critical periods in the development of specific skill and behavior patterns. When a child reaches a stage of maturation where he can best profit from a particular kind of learning, withholding of this learning experience may cause the behavior patterns to remain undeveloped. Maturation is stimulated when a child encounters challenges that are not too difficult.

We must be cautious against attempting to increase cognitive development beyond certain limits. Each point of balance within the progressive equilibration of organism and environment has to be fully integrated into the child's thought structures. As Piaget eloquently argues, "The ideal of education is not to teach the maximum...but to learn to develop, and to learn to continue to develop after leaving school." Smith concluded from a longitudinal study that stages occur in the vocal development of three and four-year-olds. His research suggests that group vocal training is appropriate for young children and results in a significant improvement in the range of c'-a' produces more general improvement in overall singing ability. A follow-up study of K-2 children who had earlier participated in the Smith study showed that no significant differences in vocal accuracy existed between these children and a control group which had not experienced vocal skill-centered training at the preschool level. It was concluded that pretraining may accelerate the normal development of vocal accuracy, but will not noticeably affect it in any other way. The gradual improvement with age for both groups of children provides evidence that cumulative musical experiences together with maturation are important factors in the development of vocal accuracy. It must be remembered that for any given age, individual differences can and do occur.
In a study with 131 six to eight-year-olds, Groves (1969) investigated rhythm training and its relationship to the synchronisation of motor-rhythmic responses. He found that age and maturation seemed to be more significant to rhythm synchronisation ability than instruction.

In research reported in Psychology of Music (1973), Sergeant and Rache convulsively demonstrated how absolute pitch, a developmental pattern and occurs near the beginning of this development. The trait is seen as being attributable to powerful visual, verbal, and motor reinforcers of pitch perception associated with the learning process, and in the critical period, and instrumental thought with its reliance on perception is transcended by conceptual thought. At this time the centering of perception on a dominant aspect of the perceptual field is especially strong. All specific pitches become the focal point of a child's aural perception. It should be possible for the child to master their absolute identity.

The research of Sergeant and Rache with 36 children, aged 3-6, showed that attention to the absolute pitch level of a melody is greatest with the 3 to 4-year-olds and diminishes with each succeeding age group i.e., the 5-year-olds and the 6-year-olds. In their study, absolute pitch diminished as demonstrated behaviorally by the accurate pitching of songs, conceptual understandings of melodic shape, intervals, and tonality increased, thus revealing an inverse relationship between these two types of tasks. By the time children begin elementary school it is quite possible that this critical period for the development of absolute pitch has already passed.

Pre-school children can arrange sounds on the basis of one dimension, i.e., fast-slow, loud-soft. They can also classify on the basis of one criterion, i.e., all loud sounds, all soft sounds. In the early elementary grades we spend too much time teaching loud-soft, high-low, and fast-slow discriminations when we should be concentrating on directional movement, tonality, etc. Zimmern and Sechrest suggested that too often children follow the line of least resistance and teach what is simply easy to teach rather than provide what the child needs to further his musical development at any given time.

As long ago as 1941, Moorhead and Pond studied the spontaneous musical making of children, ages one and one-half to eight and one-half. They found that much spontaneous music occurs with physical activity and in symbolic play. Sounds that the child had already heard were imitated. As the acquisition of language, initiative and symbolic play helped the child to begin to acquire a vocabulary of sounds which form the base for the later formation of musical concepts. For example, the child who enjoys playing with language by using it repetitively and rhythmically. This leads naturally to chanting.

Oman (1974) found that rhythmic language development parallels oral language development by using short utterances. Before the age of six, songs should be chosen that have short phrases and much repetition.

Conceptual development in musical learning is dependent upon aural perception, since musical learning begins with the perception of sound. From our various perceptual models, we develop the musical concepts that permit us to make comparisons and discriminations, to organize sound, to generalize, and finally, to apply the emerging concepts to new musical situations.

Several research studies concerning conceptual development have been conducted recently by Pflieger (1953), Andrews and Biehl (1967), Zimmerman and Sechrest (1968), Zimmern and Zwer, (1965), and Larsen (1972) who name only a few that have been reported in the literature. Before the age of six, songs should be chosen that have short phrases and much repetition.

A difficulty encountered by these researchers was the differentiation between the existence of the concept, as such, and the possession of a label which to express the concept. This difficulty has been mitigated by some researchers who used multimodal research techniques with behavioral measures. Teachers sometimes have trouble in distinguishing between teaching a concept, meaning of a term or expression that designates the concept, or in differentiating between teaching a skill and using the skill as a vehicle for teaching a concept. W. Abel (1971) in a study with 24 children found that children at all three grade levels demonstrated conceptual behavior with respect to loudness. The concepts of tempo and duration were demonstrated at a lower level, and the concept of pitch was generally lacking. There was a significant difference in performance between K-1, but not between 2-4. In regard to harmonic discrimination, Harris (1973) found that first grade children could determine harmonic change when two different chords were played. Bridges (1965) in working with 378 kindergarten-third grade children found that a gradual development in harmonic discrimination occurred from K-3. Another interesting finding from this study was that the children were better able to discriminate harmonically when listening to unfamiliar than to familiar music. This can be interpreted as an example of perceptual centration wherein the familiar music distracted them from the task at hand.

A summary of findings on conceptual development substantiated the dependency relationship between perception and conceptual behavior. Again age proved to be an important factor in the development of musical concepts, with that of loudness developing first, followed by duration and pitch. Behavioral responses appear to be a necessary adjunct to concept formation and to the demonstration of concept attainment. As a perceptual or conceptual learning experience unfolds, the proper musical vocabulary should be taught and verbalization around the concept and/or a behavioral response by the child should be encouraged.

Martin Pravel at Laval University has been engaged in fascinating research concerning 'emergent patterning in children's musical improvisations. Taking his cue from the visual arts, Pravel has analyzed the sound scribblings of children as young as age 4. Over a two-year period approximately 2,000 compositions have been collected and analyzed. In one experiment the children were provided with tape recorders to record their efforts. Initial sound gestures, somewhat analogous to kinetic scribblings, were followed by more refined compositions which seemed to take into account variations in dynamics, timbre, and, finally, pitch. The eventual form of pitch evolved were analogous to the traditional musical forms, AB, ABx, and rondos.

Research has shown that affective development does not occur in a vacuum but is closely interwoven with cognitive development. Indeed, affects such as important relationship to intellectual development and to motivation that one cannot be considered in isolation from the others. As early manifestation is the example of the infant who is a victim of his own activity because he is in the grip of an entire affective realm, including feelings and attitudes, is of prime importance to the emergence and development of a healthy self-concept.

Programmed study materials for pre-school children have been developed for research use. Ramon (1971) designed a self-instructional program to help children discriminate among sounds in the following categories: pitch, duration, and loudness. The content to be learned was presented in story form by cassette tapes and picture books. The children were required to sing, listen, perform, and move to music. A Preschool Musical Concepts Test was designed to evaluate the success of the materials. The examples in the test were taken from the program. Analysis of the test results indicated that the children were able to learn the designated concepts as measured by the evaluating instrument. The children could easily discriminate degrees of loudness while the concepts of pitch and duration were more difficult.

46

365

366
Simons (1974) has designed Measurements of Musical Learning for use with young children. Although the materials were field tested with K-4 children, they could very easily be adapted for use with three-year-olds. Findings indicated that at all four levels the highest mean score was on the identification of two rhythm patterns as being the same or different, while the lowest mean score was on identification of skips and steps. The total mean score increased with each successive grade level, with the greatest difference occurring between K-1.12

From these short summaries of research findings we can begin to detect developmental trends in musical growth. Early in the sequence is the critical period for learning absolute pitch levels which are demonstrated behaviorally, i.e., the 3-year-old is able to sing earlier learned songs in the same key he first heard and learned them. We must remember that this is a perceptual learning. But with imaginative guidance and the proper musical experiences, it should be possible for that which has been apprehended perceptually to be remembered and formed into operational concepts concerning melodic shape, tonality, and intervallic movement.

Another critical period seems to occur between the ages of five and six. Each critical period in the child's development is also a critical period for an adult, be he parent or teacher, to provide that environmental encounter which will maximize the child's potential at a given time.

The importance of both environmental setting and critical periods resulting from genetic endowment must be understood. The musical environment can or cannot provide the opportunity to learn. This environment or, in a more formal sense, the curriculum must program the child's progress of encounters and experiences with music so that his musical potential is realized. The child should find the musical environment inviting and responsive to his musical needs even as it has been carefully structured to modify and shape his musical behavior. Without rich musical resources to nurture and maximize the child's potential throughout his development, and especially at those times when he is most susceptible to learning a particular skill or concept, his potential will quite possibly remain unfilled. At any given time the richness of the environment for musical growth is a function of the appropriateness to that dynamic match between the inner organization of musical thought structures and the external musical setting.

Broad exposure to musical stimuli and experiences should be considered the over-all curricular requirement. Within this broad exposure, detailed training -- yes -- and some drill are essential for developing both listening and performing skills. Again, there are critical periods in musical development when drill and detail are most effective.

During the formative years, children can most easily learn to sing, develop attentive listening habits, play simple instruments that do not require fine muscular coordination, and engage in creative movement to music. These skills involve the sensori-motor and pre-operational stages of learning. Through these skills a foundation of musical learning can be constructed.

FOOTNOTES


23. Taebel. op. cit.


GENERAL MUSIC: A MUSIC EDUCATOR'S PROVING GROUND

Curtis Duncan
Washington University

Whenever junior high general music teachers meet together, most often they discuss their frustrations, problems, failures, and professional survival. The myriad of disappointments and disillusions have been evident in professional literature for years. The continuum of despair ranges from objectivity to subjectivity in regard to philosophy, methodology, and facilities. These concerns are also pertinent to music education at other levels, but they seem to attract more attention when they relate to the 'middle school years'.

The middle years are nebulous. They follow the crucial formative years and precede the stabilizing and maturing years. The end result is an adolescent who sends a great deal of time on a plateau of development waiting for his chronological age to catch up with him.

During the writer's many years of professional experience in middle and junior high school music, one has observed overt manifestations of dissatisfaction among a reasonable cross section of teachers of the middle years. The most frequently mentioned problems are oversize classes, excessive demands placed on teacher time as a result of after school rehearsals, lack of interest and support from school administration, the tendency to use general music classes as a 'dumping ground' for recalcitrant students, necessity of working with disinterested students, absence of prescribed music curriculum, insufficient salaries for time expensed, music program looked upon as an "educational afterthought" (with exceptions being those times of the year when either administration or parent request performances), and a paramount problem those days of discipline and behavior expectations in the classroom.

When one considers the multiplicity of problem area associated with the general music program in the middle years, it becomes rather obvious that the general music program for the middle years is indeed a 'music educator's proving ground'. The considerations that lead the writer to this conclusion are because of classes composed of disinterested pupils, pupils' level of musical attainment prior to the writer's course, musical background which consists of exposure to rock music or gospel church music, a general attitude of negativity to music of the great Renaissance, Baroque, Classical, and Romantic Masters, and the possession of the mistaken notion on the part of many students and teachers that music class is a time to take a break from sound educational pursuits, but rather it is a play period.

The Middle School in University City

Since general music classes are required of all students, except those in instrumental classes, the University City's Brittany Middle School, the writer has structured the general music curriculum so that it meets the needs of the student who is a consumer of music and the student who is a 'late bloomer'. In regards to pursuing instrumental music and the vocal students through a curriculum that combines outstanding aspects of MOP, Orff, Kodaly, Mary Helen Richards, and the use of multi-media units ranging from music of the Renaissance through the Twentieth Century in the European Tradition as well as studies in ethnic music and the development of the American musical culture.

Now, more than ever before, there exists a need for experimental approaches to a new or more effective program of general music since so many programs across the country are mere 'jump zones' for students and teachers alike. Experiments then, is an essential ingredient in any progressive and progressive program in education. This paper will suggest and recommend an approach which this writer...
has utilized for the past three years based on a quasi-experimental project in teaching style and methodology.

The General Music Class: General Considerations

The principle activities of general music classes have traditionally centered around the development of skills in singing and listening to music with conceptualization of the dimensions of music being a casual by-product. The large majority of musical activities which are conducted in general music classes are those involving musical performance with little or no attention directed toward the elements of

Above all, the general music class must not become a watered-down version of the school chorus or simply a listening class. The student should be studying good music literature from all angles—singing and playing it, listening to it, and examining its organization and derivations—and this process can become quite intensive.

The opportunity for improvement of performance skills is an integral part of the general music program. However, active listening and its development is equally important. Students should be presented with opportunities to demonstrate their awareness and sensitivity through musical performance, discussion and multimedia which will improve and or reinforce their understanding of the broad dimensions of music.

Music is related to human experience and it has an expressive content, otherwise it could not have functioned for thousands of years as a spiritual force in the lives of men.

An approach to general music with emphasis upon the acquisition of academic knowledge alone kills the spirit of music for pubescent and young adolescent children. Lack of music only goes on meaning when related to music performed through one media or another. However, a lack of knowledge denies the general music program a rich inner. Man’s relationship with music will grow only to the degree which his capacity and culture permits.

If a learner’s power of imagery is poor, a work of art will have little or no significance; if, on the contrary, his power of perception has been increased through education and or experience, the resultant understanding is much greater.

Music education’s purpose can be accomplished more effectively through a study of worthwhile music and its expressive meaning, whether the style, desion, etc., of music be in the European tradition or a contemporary American popular song idiom. The secret in accomplishing a given objective, lies in planning appropriate experiences and activities to reach established goals. Planning must be based upon a firm foundation of musical knowledge and understanding as well as experience in the utilization of pedagogical methods that lead to desired outcomes. The role of the teacher, then, is that of facilitating and or helping students acquire a genuine love and lasting appreciation of music.

Music, as one of the fine arts, is one of the most universal human expressions and the impulse to create it and enjoy it exist among men everywhere.

In American education, music is a subject discipline which provides opportunity for learning through a wide variety of musical experiences. Through a well-planned and articulated program in music education, pupils develop into informed listeners, fine performers, composers, discriminative analysts and consumers.

When the writer considers the turmoil and frustration that is in evidence in many general music classes, one wonders whether the teachers, in whose care the pupils of such chaotic classes have been entrusted, have any notion of what the role of general music should be for the situation in which they find themselves. Consequently, steps to improve the poor state of affairs cannot be taken.

There are definite reasons for the poor state of affairs that many middle and junior high general music programs find themselves in. Some of the reasons follow:

1. the lack of focus
2. uncertainty on part of the teacher as to what constitutes a well-planned and balanced course
3. the lack of structure
4. the lack of Integration
5. teachers whose major emphasis has either been choral or band preparation
6. uncertain methods of evaluation
7. the notion that general music is a play time when youngsters take a break from serious educational pursuits

Teaching general music can be as professionally rewarding as teaching a performance oriented class. In fact, general music is one of the few areas in the music program where talent musical talent can be discovered and placed on the proper musical course. Moreover, these classes are excellent opportunities to present students with many musical alternatives for self expression instead of only their limited world of music which is for many rock and roll.

The notion of a proving ground implies a place were testing of some type takes place. Consider, if you will, the many challenges that are presented in the average general music class in seventh grade here in the late twentieth century; every challenge that is met with successfully in the cause of improving music instruction makes for a continuous process of testing teacher competency, creativity and skill.

Having taught band, choir, piano, and organ, this writer has found the general music area to be one that demands a much broader and inclusive musical awareness and preparation. Since this writer was prepared in the area of instrumental music initially, it has been necessary to obtain instruction both formal and informal concerning the curriculum, methods, and materials of general music. For it is virtually impossible for one to improve a successful music program, especially general music.

In the band class, there are many immediate rewards towards which students may direct their efforts. In addition to these rewards being very immediate, they are tangible. Among them are playing with peers in rock bands, marching in parades and at the football game of the week, esteem from peer group who would like to take instrumental music but cannot afford an instrument. In the general music class, however, these rewards are not as apparent or in many cases do not exist. Motivation must be generated, for the most part, by the teacher and students as they interact.
General music is a term that has come to mean almost as many things as there are schools and school districts that offer the course. However, for the purposes of this paper let us consider this definition. General music is characterized by the following:

1. an expanded music class with stress on multimusic experiences for maximum class participation
2. a class with clearly defined objectives both long range program objectives and short range operational objectives which will provide focus for the course
3. a sequential approach which leads to an in-depth understanding of the basic dimensions of music thereby effecting course structure
4. a flexible but directional and comprehensive organization of the course that will provide for various musical experiences and integrated learning

Pupils and teachers have sometimes become so involved with class activities from day to day that activities become ends in themselves. The importance of listening, analyzing, composing, singing, and playing should not be underestimated, but must not become ends in themselves. It follows, then, that the general music curriculum needs to be organized so that pupils are presented with a course of study that leads to an understanding of basic musical concepts, the theoretical and expressive nature of music. For "conceptual development", Woodruff has written, "is not simply one of several interests for a student. It is rather the essence of his concern."

A logical first step in the development of any program of study is a consideration of the abilities and needs of the people that the program is to serve. Certainly the needs of urban and suburban children are vastly different from those in a small rural town. Consequently, a careful assessment of pupil needs should form the basis of any curriculum development. After the assessment has been completed, the curriculum must be developed and directly related to program objectives.

Objectives

The practice of dissecting the vast knowledge of music knowledge into a series of unrelated lessons as the basis of the seventh grade general music program is not acceptable. In fact, this happens to be one of the very distant weaknesses of many programs. A teacher of general music in today's educational arena must organize his program around suitable behavioral objectives that act as guides in the formation of a relevant curriculum. Objectives form the basis upon which a durable and coherent program of music education is built. Specifically, Leonhard and House say that objectives serve the following purposes:

1. assure positive relation of musical instruction to the broad aims of school and community
2. form the basis for planning educational experiences
3. control the daily adjustment of methods and materials
4. provide criteria for evaluation of instruction.

Before the general music teacher develops his instructional or class objectives, he must receive direction from other goal and objective levels. Consider the following example:

School goals will provide information as to where the music program can make its unique contribution to the total development of each student. Broad music goals will state, in general, how the music program intends to contribute to the achievement of school goals. General music program objectives will present in more specific terms those musical behaviors in the program that will lead to attainment of broad musical goals. Course objectives will state in more specific terms the musical behaviors students will exhibit as a result of the general music course. Instructional objectives are the specific behavioral objectives the teacher uses in preparing his lessons for a day, week, or longer segment of instruction.

The table which follows shows the five levels mentioned above that are related through the selection of objectives in one area.

<table>
<thead>
<tr>
<th>Table 1</th>
<th>The Relationship of Goal and Objective Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>School Goal</td>
<td>To develop student's aesthetic sensitivity to all human experiences.</td>
</tr>
<tr>
<td>Broad Music Goal</td>
<td>To develop each student's aesthetic sensitivity to all music experiences.</td>
</tr>
<tr>
<td>Program Objective</td>
<td>The musically sensitive individual perceives the theoretical and expressive concepts that relate to musical dimensions and style.</td>
</tr>
<tr>
<td>Course Objective</td>
<td>The musically sensitive individual understands the musical dimensions.</td>
</tr>
<tr>
<td>Instructional Objective</td>
<td>By writing the words &quot;ostinato&quot; or &quot;no ostinato&quot; in a numbered list on paper, the student will demonstrate his ability to identify compositions based on either a melodic or rhythmic ostinato to be played on a tape recorder. Of the ten short compositions to be played, five will have been heard in class and five will be unfamiliar. Each composition will be played twice, and three mistakes or fewer will be considered satisfactory.</td>
</tr>
</tbody>
</table>

The goals and objectives on the first four levels in the table above are not written in behavioral terms, but as product behaviors. At the instructional level the teacher should write behaviorally stated objectives that adhere as much as possible to the criteria suggested by Robert F. Mayer which has been generally accepted in educational circles. The lack of attention to the program sequence has been a flaw in traditional general music classes. It appears logical that music teachers should teach the materials of music. However, effort has often been expended in teaching geography or history through music, or irrelevant facts about composers' lives, an identification of terms rather than conceptual understanding of music. To facilitate understanding and increase the possibilities for enjoyment, an understanding of musical structure and style are essential.
Developing conceptual understanding through related precepts, the perceivable elements of the basic concept, is not restricted to any particular type of music instruction, to any grade level, or to any ability level. A single concept may be presented repeatedly by progressively sequencing from the general to the specific, the simple to the complex following Mursell’s cyclical and Bruner’s spiral approach. This type of organization is illustrated by the table that follows, showing how one aspect of the concept of melody can be presented at various levels in sequence.

Table 2

<table>
<thead>
<tr>
<th>Sequential Organization of Concepts</th>
</tr>
</thead>
<tbody>
<tr>
<td>More Specific (Complex):</td>
</tr>
<tr>
<td>the melody outlines a diminished seventh chord ascending and six tones of a minor scale descending.</td>
</tr>
<tr>
<td>More Specific (Complex):</td>
</tr>
<tr>
<td>the melody ascends by minor thirds and descends by major and minor seconds</td>
</tr>
<tr>
<td>Specific (More Complex):</td>
</tr>
<tr>
<td>melody moves up by skip and down by step</td>
</tr>
<tr>
<td>General (Simple):</td>
</tr>
<tr>
<td>melody moves up and down</td>
</tr>
<tr>
<td>Precept:</td>
</tr>
<tr>
<td>melodic direction (aural and visual)</td>
</tr>
</tbody>
</table>

Concept: melody

Through the general music class, students can become involved in music in a variety of ways such as creator, analyzer, performer, listener, and composer thereby learning the basic concepts underlying the general structure of music.

The general music program organizes sequentially fosters musical growth through conceptual understanding and provides the teacher with the necessary nucleus for curriculum planning. As the center of the program music structure is not restrictive, since it is possible to perceive almost any basic concept through various experiences and a broad selection of music literature.

Organization With Emphasis on Conceptualization

The general music teacher whose classes are organized to develop aesthetic awareness and sensitivity through conceptual understanding will find it advantageous to work within some type of organizational framework. The writer of this paper has found this plan to be helpful.

1. Understand well and be able to verbalize each broad dimension. Concept
2. Analyze and understand those precepts related to a particular concept, that the student must perceive in order to arrive at a conceptual understanding. Precept
3. State in one’s long range goal and daily instructional planning the desired behavioral changes in the student that should result from class to class experience. Objectives
4. Select experiences and music that will be suitable for the development of a particular concept. Musical Experiences
5. Develop evaluations to measure the effectiveness of lesson organization and presentation as well as behavior change. Evaluation

So that an individual may see how this plan works, let us consider the organization of one conceptual area, rhythm. Before considering this area, however, it is important that the teacher recognize that the concepts relating to rhythmic structure will only be understood on a surface level if they are not related to other conceptual areas.

1. Concept: The initial step in the plan is to state the basic concept to be developed. For example, rhythm in its broadest sense, is concerned with the temporal motion of musical sound and silence. It is an organization of sounds and silences of various lengths that creates a series of time patterns relating to an underlying pulsation.

2. Precepts: The second step is to outline those precepts that will support and facilitate student understanding of the broad concept. The following are examples of precepts related to the structure of rhythm.

a. Beat-Rhythm is generally controlled by a felt unit of time, referred to as beat, which marks off duration values and organizes the flow of motion in the music. The beat is continuous even in moments of silence.

b. Accent - Certain beats are more prominent than others. The combination of stressed and unstressed beats give the music a feeling of pulsation.

BEST COPY AVAILABLE
c. Meter - Meter is the measurement of rhythmic motion through the organization of time values in relation to a given unit of time. A meter signature specifies the unit of measurement and determines the normal sequential order of heavy and light beats.

d. Polymeter - Music can be organized so that two or more meters are used simultaneously.

e. Polyrhythm - Music can be organized utilizing a variety of meters within a section, movement or entire composition.

f. Rhythmic patterns - Sounds and silences of various durations can be grouped in relation to the beat to create a variety of rhythm patterns.

g. Syncopation - A rhythmic pattern within a given meter may be characterized by an irregular, unexpected, shift in accent that is called syncopation.

h. Polyrhythm - Coexistent contracting rhythm patterns.

i. Tempo - the varying degrees of overall fast or slow motion. The interpretive aspect of rhythm and the pace of the music is referred to as : tempo.

j. Notation - The relative duration and metrical organization of rhythmic sounds and silences can be represented by graphic symbols.

3. Objectives: Based on the precepts outlined, the teacher can develop long-range operational objectives identifying behaviors to be observed. For example: the student who has grasped the over-all concept of rhythm should be more discriminating in:

a. determining the basic beat and pulse of selections he hears;

b. recognizing the basic metric structure of a piece of music;

c. identifying even and uneven rhythms aurally and visually;

d. recognizing rhythmic devices used in contemporary music, such as irregular meters, multimetric changes, polyrhythm and polyrhythmic combinations.

e. understanding and using the symbols of rhythmic notation.

f. Interpreting rhythmic notation as it relates to a composition.

At the immediate level of operation, a teacher can now develop specific behavioral objectives for a given lesson, a series of lessons, or even a unit.

4. Musical Experiences and Literature: The fourth step in the process of organization is the selection of music literature, musical experiences, and method of presentation. The following considerations should receive prime attention, however.

a. The existing level of the student's musical understanding, knowledge, and skill should determine the selected at which a concept and its related precepts are organized.

b. The grade and age level at which the lesson is to be presented will guide the teacher in determining the experiences and materials necessary to the development of an understanding of the concept.

c. The relevancy of the literature to be used and the suitability of the experience, as these relate to the student's personal musical background and to his community-home-school environment (suburban, rural, inner-city) must influence a teacher's choice.

A Course for Today's Pupils

General music classes have been organized in a variety of ways, but it appears to this writer that most are variations or two basic formats, the historical and mixed unit. However, neither of these formats is entirely satisfactory. What is needed, is a course that has the diversity and interest of the unit format and offers a broad and systematic perspective of the historical format connected by clear direction and singleness of purpose, necessary to an well organized plan. Such a plan follows on the ensuing pages.

To include all types of music in the course, we must have some form organization that is inclusive and yet rather compact. Despite the infinite number of styles heard throughout the world, five basic classifications have proved useful in organizing material and music for effective presentation by this writer dealing mainly in a western orientation. They are classical music, folk and ethnic, jazz, popular, and theatre music.

These areas form the units varying in length; in all units with the exception of the folk and ethnic unit, chronological and developmental formats are used. However, if the class is to move in the direction of developing concepts based on the basic dimensions of music, another unit is required. This unit would be an introductory unit which outlines the basic dimensions of music. This unit must be constructed so that it includes examples of many types of music so that students may experience manifestations of the basic dimensions of music in many types and styles so that a broad frame of references is available to which the students may relate new topics as they are introduced. In this way, the pupil will bring to each new topic a reservoir of basic understandings that should simplify his new learning regardless of the diversity of new material presented.

Before we pursue a discussion of each unit, consider two points of special emphasis. Firstly, we must remember that in a course such as this we are attempting to develop the pupil's musicality so that he will be able to function independently as a prospective consumer of music throughout life. However, a student can be educated musically to the degree that he is able to approach a work or style intelligently, with the basic knowledge of musical dimensions and their relationship allowing him to understand what is 'going on' in the music and tools to become more involved if he wishes. In order that this may be accomplished, it is necessary to guide the student initially in an understanding of basic concepts of music structure, general stylistic development, and basic characteristics of various musical idioms, from which specific understandings will emerge.

While it is important for the student to become familiar with certain works that have come to be considered as musical milestones in music history, it appears to this writer to be more important that a student grasp an understanding of the broader period, style, or form of which a work is a part. Otherwise, what a student learns may not permit him to perceive independently the components of other works he hears in the same idiom.

Secondly, it is rather important to select carefully musical works to be used in illustration and examination in class. In each unit, shall we use only standard concert repertoire which is widely accepted as great music? Many teachers feel...
that only works that are widely accepted should be studied. What difference does it make what types of music will be accepted in the very distant future? Students are living now and the music they hear is now. Are they only supposed to enjoy music that will last for one hundred years? If this practice is followed, it means that if one had lived at the end of Mozart's life, his music would have been ignored because it was not then fashionable and was not to be recognized until many years later. In line with this thought, there is a place for the music of second and even third class composers as long as the music is used to point out some valuable understanding on the student's part. If, for example, it is easier for a student to learn a particular technique in a rock tune such as 'Midnight Train to Georgia' as opposed to a work by J. S. Bach which demonstrates the same technique then use the rock tune for initial exposure. With this trend of thought in mind, this is a sample of what several basic units might include.

Unit I: The Dimensions of Music

This unit is an introduction to the broad concepts required for an understanding of all types of music. Present here are the basic ingredients of music in a layman's terminology and then relate them to specific musical terminology at the course progresses.

Build from the simple to the complex, the most general to specific, and from the concrete to the abstract. Begin with a study of the characteristics of the most basic building blocks, musical tone: pitch, duration, volume, and quality. Pitch and duration do not imply or suggest the teaching of music reading. Pupils can benefit from simple charts and an occasional full score with the ability to feel metrical organization and melodic contour. Tone can, at this point, be enlarged to include three basic elements: rhythm, melody, and harmony.

Initially, rhythm can be studied in terms of beat, pulsation, meter, tempo, syncopation, and repetition. In later units, these factors are examined in new types of music as the student begins to grasp other concepts such as polyrhythm, polymeter, specific types of accents, additive rhythm, the effect of text on the organization of rhythm, and the rhythmic basis of melody. Melody may be studied in reference to instrumental or vocal idiom, its relationship and function with other parts, its development of material, other musical matters. Consider harmony, in the first unit, in terms of consonance, homophony and polyphony. Throughout the course harmony must be constantly reexamined.

After most students have come into a basic understanding of the musical dimensions with the exception of form, these dimensions may be integrated through principles of unity and variety to form complete works. At this point, precepts of motif, phrase, and period may be studied which will lead to an understanding of basic music structures such as binary, ternary, and rondo as they relate to the concept of musical form. To make the unit as well rounded as possible, the unit may be concluded with a brief study of interpretation and performance practices.

Unit II: Popular Music

Many music educators are still of the opinion that popular music has no place in the general music curriculum at any grade or level. However, this writer takes a different attitude since there is a vast variety of good popular music that lends itself to effective use in the teaching of the dimensions of music if taught not just as a means of entertainment but as a means of understanding the basic structure of music. The study of popular music can be an excellent means of teaching music appreciation and can be a valuable tool in the development of musical skills.

Course Outline

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Unit IV: Music Theory

1. Music Notation
2. The Major Scale
3. Simple I-V-I-V-I Chord Progressions
4. Basic Music Vocabulary
5. Manipulation of the Dimensions of Music

including rock. Analysis should relate to the basic dimensions introduced in Unit I, and could include an examination of song forms, relationship of parts, and the balance between music and lyrics as well as instrumentation.
Unit V
Folk and Ethnic Music
1. Country and Western Music
2. The Nashville Sound
3. The Afro-American Forms
4. Indian, Mexican, and Scottish Folk Songs
5. Application of Musical Dimensions

VI
Music of the American Theatre
1. Operetta
2. Musical Comedy
3. Musical Play

VII
Review of Dimensions of Music, Musical Forms, and Styles
12-18

Classroom Management, Discipline and Expectation

Discipline and expectation are inseparable if a satisfactory learning environment is to be achieved. Obviously, the programs of school discipline are planned for the general student population by the administrative staff, however, these general guidelines only apply to discipline problems that arise, for the most part, outside of the classroom. It is necessary, then, for the teacher to plan and implement a specific program of classroom management, discipline expectations in terms of behavior and learning outcomes, and appropriate reinforcement for positive or negative class behavior. Let us consider each of the following areas at this time.

Carefully planned instructional objectives, a well planned course with appropriate content, adequate teaching aids and equipment necessary for the implementation of a successful program in general music, and an effective teacher minimize discipline problems. However, since the general music class serves such large groups of students it becomes extremely necessary to set a rather definite list of student expectations which will serve to guide the students as they move through the school term. This writer normally spends the first month of the school term emphasizing the concept of what the rules of the class decorum will be for the year. Such basic items are taught with regard to a student’s personal freedom and rights in the class setting, the appropriateness of visiting or socializing during class sessions, student responsibility for behavior and class work, tardiness, and general expectation.

In keeping with this trend of thought, students are clearly informed at the beginning of each semester what the consequences of inappropriate behavior will be. After basic rules of operation are firmly established and pupils understand what is expected, one may begin the teaching-learning process. When there is the necessity to reprimand a student, several verbal warnings precede the execution of more drastic measures of behavior modification. When verbal warnings do not bring desired results, the student has the option of choosing from a list of rather distasteful tasks that have been set forth from the beginning of the school term. These tasks include such assignments as writing a two-page essay explaining his reasons for the type behavior that was displayed and why it was inappropriate to the classroom. While such an assignment is not related to music education, it does provide a necessary type of learning. For if a classroom is in chaos because of disruptive pupils very little constructive learning takes place. Therefore, this writer often finds that it is necessary to teach children how to get along in the classroom community before subject matter of any type is presented.

It is important that teachers formulate basic plans of operation for each class. Moreover, it is equally important that there is follow-through in behavior modification processes so as to impress upon the students one’s consistency and expectations. If a teacher begins the year with a rather strict and traditional class structure, it becomes a simple matter to vary this basic pattern. However, if classroom management, discipline, and pupil expectations are left to chance, classes soon become fields of war.

Appendix I

Course Provisions

I. Instruments
II. Record Library
III. Teaching Aids
IV. Equipment
V. Lesson Plans

I. Instruments
1. Two pianos
2. Large and varied collection of rhythm instruments e.g., woodblocks, rattles, tambourines, etc.
3. Set of Orff Instruments
4. Guitar (electric and classical)
5. Basic band instruments
6. Radio, television, tape recorder (reel to reel and cassette)

II. Record Library
1. Music Masters Collection: A survey of “classical” music and important composers, their contributions, and the main forms of each period of music history from Baroque to the Twentieth Century
2. Extensive and varied record collection or an available source
3. Use student tape and record collections
4. Access to public library record holdings

III. Teaching Aids
1. Lesson plans (see sample plans)
2. Abundant supply of staff lined paper
3. Filmstrip collection with accompanying recorded narration, teacher’s guide and suggested projects
Appendix II

Sample Teaching Strategy

GENERAL MUSIC

GRADE: 7
DATE: 11/4/75

OBJECTIVES:

1. describe most types of music according to the tempo and also to perform at the different tempo markings
2. see and understand how tempo markings that were used in classical and other periods of musical styles are the same tempo markings used today in the music they listen to and dance to
3. listen to melodies and recognize the way in which they move, and reproduce them by singing and/or playing an instrument
4. complete a musical sentence by finding the tonic or tonal center of the phrase
5. differentiate between the melody and other parts in a song, e.g., specify other things (melody, harmony and other dimensions)

MATERIALS:
Records, record player, metronome, piano, Orff instruments, and prepared music sheets.

PROCEDURE:

1. Tempo
   a. What is tempo?
   b. Some tempo markings used by composers in writing music:
      1. Largo - very slow
      2. Adagio - slow
      3. Andante - moderately slow
      4. Allegretto - moderately fast
      5. Allegro - fast
      6. Presto - very fast
   c. Listen to recordings with these various tempos and tell which ones they are listening to. Then play other recordings and allow the students to perform the examples on the instruments.
   d. Most rock music usually uses which of these markings above and why?

2. The Metronome
   a. Discuss the use and show how it is used.
   b. MM = stands for Maestro Metronome.
   c. MM = 60 means 60 beats per minute.
      1. Let the class check the metronome against the clock for accuracy.
      2. Pass around the album covers so they can see how these tempo markings were used in classical works.

IV. Equipment

1. Filmstrip projector
2. Phonograph
3. Film projector
4. Opaque projector
5. Screen
6. Metronome

V. Sample Lessons: See lesson plans
PROCEDURES:

1. Melody
   A. What is melody?
   1. Play isolated pitches
      a) Response - What is this melody?
   B. Listen to a melody, recognize the way in which it moves
      upward or downward.
   1. Example - Zum, Galli, Galli
   C. Guess the song by looking at the notation on the board:

   1. Play the pitches slowly.
   2. Get another clue from the notation of the rhythm on
      the board:

   3. Both of these together make up the melody of this song.
   D. Listen to the following three melodies:
      1. Dmitri Shostakovitch: The Golden Age, "Polka"

   2. On the board: Traditional song - Auld Lang Syne

   a. clap the rhythm, what song is this?
   b. listen to it with both of these things.
   3. On the board: The Way We Were

4. Response - Which of the three would be the most
difficult to sing? Which has the widest range?
E. Each melody looks and sounds different from the others.
   1. Definition - A rhythmic succession of single tones.

2. Cadences
   A. Clap the rhythm of Auld Lang Syne again.
   1. Response - What happens in measures 4 and 8?
      a) the movement seems to stop
      b) melody has come to a resting place, but the effect
         is as if a question had been asked
   B. Sing measures 5 - 8, notice that in measure 8 there
      is another resting place and that upon reaching it the melody
      sounds finished.
   1. Points of arrival are called cadences.
   2. Cadences divide the melody into sections called phrases.
   3. Phrase 1 - 4 punctuated by an incomplete cadence while
      phrase in measure 5 - 8 punctuated by a complete cadence.

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The Degradation of the Blues
Kenneth Waters
Washington University
Introduction

According to Le ROI Jones, "blues means a Negro experience...[i.e.] the one music the Negro made that could not be transferred into a more general significance than the one the Negro gave it initially..." Having historic origins in the cries, calls, and hollers of field slaves, the blues became an art form used to express personal feelings of dissatisfaction, remorse, anxiety, and/or regret. Singing the blues was and is a way by which one can tell the world about his misfortunes, and considering the historical plight of the American black man, the blues thus serves as a tremendous emotional outlet for such. Charles Hart explains:

For many Negroes, life is one long sacrificial ritual.
The blues artist, in telling his story, crystallizes and synthesizes not only his own experience but the experiences of his listeners.2

Nevertheless, the blues, as art, has never enjoyed much acceptance and praise in America. In point of fact, it has--in its purest form--experienced rejection and exploitation. Suffice it to say, this has not occurred because the blues contain poor, unartistic qualities. Rather, resistance has existed because of racial conflict, ignorance, and the detached psychological hang-ups of the American audience.

It is the purpose of the paper which follows to consider the rejection, exploitation, and degradation of the blues idiom in America. First, the author will discuss this rejection in the context of the nature of the blues. From there, the author will point out the overall ignorance as to the meaning and intent of the blues; the biased treatment of blues by music critics, the exploitation of the idiom by the American music industry; and, finally, the negative reaction and subsequent effect on the acceptance of the blues by northern blacks and the black middle-class. Hopefully, in the end, the reader will have a better understanding of the injustice which has been accorded on of the most telling and moving art forms in the history of music.

The Treatment of the Blues
The Nature of Blues and the Emotional Forces Which Detерred Acceptance

To say that the blues, their form and content, arise strictly in response to slavery, oppression, and racism is to deny Afro-Americans of their own peculiar culture. For such an argument implies that culture is the result of immediate social-political forces. It denies any sense of heritage, and serves to oversimplify the problem of "blues acceptance". After all, poor whites have been socially oppressed, and they did not create the blues. The fact of the matter is that although the social conditions in America have placed blacks at a distinct disadvantage--both economic and social--the blues did not arise because of that alone. It was African retentions along with social conditions that culminated in a distinctive Afro-American culture and world view, a view which was expressed in one way, through the blues idiom. In any event, the misconception that blues resulted only from oppression, coupled with the intensely personal nature of the music, contributed greatly to the resistance to the blues.
It is certainly true that primitive blues emerged directly after slavery. It was a personal music, in the sense that it began with the performers themselves; there were no formalized notions of how blues were to be performed. The end of the vigorous and almost exclusive hold of the Christian Church on the black man's leisure time, relates LeRoy Jones, "resulted in a great many changes of emphasis in his music." The blues is formed out of the same social and musical fabric that the musical issued from, but with blues the social emphasis becomes more personal. The metaphysical Jordan of life after death was replaced by the more pragmatic Jordan of the American master: the Jordan of what the ex-slave could see vaguely as self-determination.

One can see that "self-determination" on the part of blacks was probably an abhorrence and threatening thought to white American, and the author is certain that this is one reason why blues was, if from on up, ignored. Also, given the deeply personal quality of blues singing and musical form, there was no particular method for either learning or understanding blues. Undoubtedly, this contributed to its not being accepted. As white Americans, having no connection with the origins of the music, both culturally and socially, were left with the responsibility of assigning their own meanings to the music. Racism, fear, and ignorance led to all the wrong meanings. As Jones points out, blues "were secret as far as the rest of America was concerned, in much the same sense that the actual life of the black man was secret to the white American." An example of the ignorance of blues is the age-old conception that they are sad songs. Critic Walton relates that this may have occurred because of the idea that the blues were created solely out of a slave's work experience. In addition, there has been a failure to include and conceptualize purely instrumental forms of blues in traditional analyses (a subject to which the author will address himself later), and people, critics, and laymen alike, have placed too literal an interpretation of the lyrics of vocal blues.

Insofar as a too literal interpretation of lyrical is concerned, the fact that many blues contain sexual intimations, a fact which offends the Puritan morality, has associated them with and as "low" music. The truth of the matter is that the values normally associated with Protestantism-thrift, sobriety, inner-directedness, strictly codified sexual behaviors, and respectability-tend to be reversed in the Negro cultural framework. This is something that is neither acknowledged nor respected by American audiences; the blues have met a good deal of resistance due to simple ignorance of this fact.

The Critic's Treatment of Blues

Part of the reason why blues have not enjoyed wide spread acceptance in America has to do with the general rejection of the music by critics. Many of these so-called "critics" of blues, jazz, and black music in general, are neither musicians or consumers of these forms and do not possess the musical background to make such value judgments. As would be expected, these "experts" have been and are influenced most deeply by the social and cultural mores of their own society. Naturally, their criticisms have tended to reflect many of the attitudes and thinking of that society. In America, critics traditionally judge music against European standards. In this regard, blues-or ANY back musiccannot be good; it has its own characteristics. A lot of this is probably due to the fact that the characteristics of African music have not come to light until recently, i.e., there have existed no other standard upon which to base judgment, says Harold Courlander.

It is only within recent times that we have had access to a large body of recordings of African music. Many of the previous works on which the conclusion is based deal primarily or exclusively with the so-called 'spirituals.' Furthermore, close familiarity with Negro music, folk music as it is heard in its natural setting, and with the problem of entertainment, it was more nearly appropriate for it, to disregard it altogether, unavoidably suggests that the notions from such Negro music has been analyzed may be inadequate and include false implications.

Another problem arises as critics seem to assume the essence of all music to be fully explored and appreciated only when the melodic characteristics have been examined. Yet, the emphasized characteristics of black music in general are not concerned with melody. Jones points out that a strict musical and psychological analysis of blues is a fruitless endeavor. It is impossible to convey through musical notation the various nuances and inflections associated with the blues style. Explains Jones:

Each note means something quite in adjunct to musical notation, that is, regardless of its stylistic considerations, part of the black psyche as it dictates various forms of the Negro culture.

It's just that music critics, like other Americans, tend to take for granted the "social and cultural milieu and philosophy that produced Mozart." And thus, against such a standard, blues have been and are degraded. Exploitation of Blues by Record Companies, Radio and Night Clubs

Understandably (in a sense), record companies were hesitant to develop, record, and market black music. For many years there were many reasons for this, the most prevalent of which being the uncertainty as to the size of the market for new music. Record companies, like all other businesses, are in business to make profit. Considering the low public profile of blacks in general and black music in particular, it may have seemed economically unfeasible to record black artists. Consequently, racial prejudice on the part of large record companies had some bearing on the decision not to record; however, the prejudice perceived to permeate the music has probably had more impact. Nevertheless, commencing with the 1920's, a definite market for the blues was considered to exist among black people. The first black blues singer to make a commercial recording was Manie Smith, who gave a rendition of Perry Bradford's 'Crazy Blues.' It is little wonder why it was that Manie Smith was recorded as opposed to someone like Ma Rainey or Bessie Smith. For, according to LeRoy Jones, Manie Smith's style of singing was more in the tradition of vaudeville stage than it was "bluesy." Also, 'Crazy Blues' was not a blues. It simply had the word 'blues' in its title. Thus, it was "safer" to record Manie Smith, in the sense that her 'legs are all blackness' was most likely to achieve some level of acceptance. In the same vein, this and subsequent black recordings were categorized and sold as "race" records. Ralph Peer, then recording manager of Okeh, admitted a fear of advertising "Negro" records. Every precaution was taken against outright rejection before black music was released to the public for consumption.
Hamie Smith's record sold extremely well—at a rate of 8,000 copies per week. Six years later, Victor's Slipkey's "Black Snake Blues" sold 150,000 copies in one year. Indeed, race records very swiftly became big business. Companies began to seek out and hire a variety of black talent. Nevertheless, until August of '24, recording was limited to women. No doubt the feeling prevailed that the sexual intimations of blues songs would appeal, to a greater extent, to the male public.

Papa Charlie Jackson, the minstrel show ragtime banjo player from New Orleans, finally produced a male singer market by recording his "Papa's Lawdy Lawdy Blues" and "Any Man Blues".

As time progressed, most record companies, e.g., Okeh and Columbia, sent recording units out and around the South. While the purpose of this was to discover and record the good and hidden talent of the various towns, many factors prevented this process from actually realizing complete success. For one thing, the recording units remained only a few days in the main cities on their tour. Also, they did not return for another year or so. This, coupled with the reluctance of some blues performers to record, the unreliability of others, and the variable tastes and selection methods of the talent scouts, led to a recording system which was haphazard at best.

Because the market for blues was perceived to be black, advertising was geared to accommodate the black audience. Leflo Jones explains:

Early advertising for the race records might now seem almost ridiculously crude, but apparently was effective and very much of the time. This is an example taken from a Columbia Records advertisement that appeared in 1926: the song being advertised was something called Wasn't It Nice:

"There sure an mean harmonizin' when Howell, Horse and Bradford start in on Wasn't It Nice. You're gonna think it's nice when you once get the old disc spinning. The boys are still going strong when they tackle the coupling Harry Willis, The Champion. This trio sneaks right up on a chord, knocks it down, and jumps all over it."

Distribution was a function of the extent of parochialism, i.e., it was easier to sell records of local artists in their home districts than outside. Many times, the local orientations of the singers and their blues made them hard to understand and, therefore, unacceptable to other blacks. Thus, it was difficult for any one artist to achieve much fame outside of a limited area. This fact also accounted for the generally low exposure of people to the many different styles of blues; its localism was definitely damaging to music-making.

Through the 1930's, records were distributed primarily through music and furniture shops by means of traveling salesmen. The late thirties saw the inroads made in group entertainment by the recording industry bolstered by the introduction of the juke-box. In a similar fashion, radio exploited the black market. Paul Oliver describes this phenomenon:

(1) The potential of large untapped commodity sales overcame the lingering prejudice about hearing blues records to Negro audiences. Coloured disc-jockeys with fanciful names and a swift, jivey lilt patter introduced the records, advertised goods sold, and the blues began to boom. If there was an adverse effect it was the steady wearing away of live music in some districts. There was a bonus in the opportunity that the demand for records gave to singers to record.

In spite of the fact that radio increased the overall exposure of blues, thereby lending credence to its acceptance, it also changed the music. For blues singers, says Oliver, "like most everything else" once on record, "have always been vulnerable to commercial interests", as the "work of those singers of the thirties who tried to adapt themselves to the demands of the record companies clearly shows..."

Artists, in order to be retained by these companies, had to adjust their music to demand; they had to change with the times. And thus, in the 1950's, at a time when the nation's black population had a median age of 25.1, the original blues of the South were forced to surrender to new tastes; they returned to relative obscurity.

Northern Blacks and the Black Middle Class

One may tend--and understandably so—to limit the explanation of the rejection of the blues to the age-old context of white vs. black, (or white over black). Indeed, thus far, such has been the leaning of this paper. Nevertheless, on its face, it is a retarded and lopsided view, one which exaggerates many issues, while clouding others. For, in fact, where the degradation of blues music is concerned, the black man himself is not guiltless. He, too, has had his misconceptions and fears as to the meaning and worth of the music, and thus he, too, has contributed to its general rejection.

As was stated before, blues music originated in the small towns of the rural South. Its basis being the cries, calls, and Hollers of the field slave, blues, as an art form, was deeply attached and related to the cultural heritage of the black man. Not every black man was a Southerner; however, the blues were perceived to be tied with the Southern culture, a fact which aroused conflicts within Northern blacks. Leflo Jones explains:

The Northern Negro, i.e., the man raised in the North, had from the outset of his life been exposed to the kind of centerless culture to which (migrating Southerners had to adjust). The young Negro who had always lived in the North was never aware of the 'pure' Negro culture than the consciously diluted model that existed there. Before the great movements north, many Northern Negroes were quite purposely resisting what could be called their cultural heritage in an attempt to set up a completely 'acceptable' route into what they had come to think of as the broadened of American society. Blatant references to the 'South', and all the associations that word produced were not tolerated.

Consequently, the Northern black musician, who played popular music, usually performed within the tradition of white "show" music. Much like New Orleans Creoles, he learned European-oriented music on European instruments from teachers who favored the European style. Garvin Bushell, a clarinetist, explained this phenomenon in an interview with Nat Hentoff:

(The playing of) New York musicians of the time was different than the playing of men in Chicago, St. Louis, Texas, and New Orleans. New York 'Jazz' then was nearer the ragtime style and had less blues. There wasn’t an Eastern performer who could really play the blues. Ne
later absorbed how from the Southern musicians we heard, but it wasn't original with us. We didn't put that quarter-tone pitch in the music the way the Southerners did. Up North we learned the ragtime concept--a lot of notates.17

Differences in cultural orientation did not only cause a difference in music. It cases between the Northern and Southern blacks, but also the different societies to which each related gave rise to attitudinal differences which were, for a long while, irreconcilable. In the North, the assimilation of white attitudes and mores led many blacks to attempt to achieve higher social and economic status. In the process, many attempted to hide their blackness. After all, blackness was, in this country, more of a liability than an asset. Jones illuminates this matter:

It was the growing black middle class that believed that the best way to survive in America would be to DISAPPEAR completely, leaving no trace at all that there had ever been an Africa, or a slavery, or even, finally, thought, to be CIVILIZATIONS.20

The gradual acclamation and subsequent growth of a definable black middle class, of course, affected blues music in a negative way. The form was generally considered to be disreputable. As Charlie Gillette explains, it was "the music of rough bars, all-night parties, and even brothels."21 As late as 1925, the playing of blues in the average black middle class home was a rare event. Perceived as suggesting a low element, the blues posed a definite threat to that segment of the black community which was earnestly striving to be accepted by the white society. And thus Northern blacks in general, and the black middle class in particular, were intent on keeping blues, in its original form, music in relative obscurity. They were successful.

Conclusion

In this paper, the author has tried to explain a number of variables which have contributed to the ultimate rejection of blues in America. Without a doubt, two hundred years of ignorance and the "white superiority" mentality stand cut as the most pervasive forces inducing this result. And, with this in mind, the author feels it necessary to close by rushing to the defense of the middle class black man whom the author just chastised for turning his back on his people and his heritage.

The author agrees with LeRoi Jones that the "morality" of the black middle class, i.e., its anti-blackness disposition, was not "completely the result of a spontaneous reaction to white America."22 In point of fact, much like the "morality" of the many segments of the white society, it was carefully induced, nurtured, and cultivated by certain elements. Specifically, one can point the finger of guilt at early Protestant missionaries, who not only pressed for the founding of black Christian churches, but also attempted to instill Puritan dogmas into their new black congregations. Jones continues:

The educational philanthropists were also attended and shaped in their beginnings by these same missionary elements, who sought to show the savage heathens how through 'prayer, study, industry, and work' they might somehow enter into the kingdom of heaven (even though it might be through the back door).23

FOOTNOTES

5. ibid.
7. ibid.
8. ibid.
14. ibid., p. 15.
15. ibid., p. 14.
16. Jones, Blues. p. 99. Also, it should be noted that "Crazy Blues" was not the "Blues" per se. It simply had 'Blues' in its title.
17. It was not until Bessie Smith's recording of "Down Hearted Blues" (February, 1923) that the authentic blues voice was heard on record.
18. One can certainly see that it was a 'white' mind that was responsible for the ads.
21. See ibid., pp. 140-141, wherein there is a discussion of the way in which radio created a vast amount of unemployment for blues singers.
22. Oliver, Story, pp. 140-141.
23. ibid., p. 157.
24. ibid., p. 158.
27. ibid.
28. ibid., p. 124.
29. Gillette, C., The Sound of the City.  New York: Outerbridge and Dienstfrey, 1963, p. 175. (This is a guess, which the author will verify.)
30. Middle class blacks of the twenties even went so far as to try to pressure Black Swan Records, the first black-owned record company in America, to drop blues from its collection. They claimed it wasn't "significant" enough. See Jones, Blues, pp. 128-129.
31. By 'rejection', the author is speaking of an OVERALL sense, i.e., on a relative scale.
33. ibid., p. 126.
34. ibid.
ABSTRACT

LEOPOLD MOZART'S PARTITA IN D: AN EDITION
Michael E. Berger, Doctor of Musical Arts
University of Missouri-Kansas City, 1974

Only a small amount of Leopold Mozart's music is available in modern edition. The largest collection containing twenty works, is edited by Dr. Max Seiffert in the Denkmaler der Tonkunst in Bayern (Vol. IX:11). The purpose of this paper is to make available in modern edition the Partita in D, which is comprised of six movements (Menuet, Allegro assai, Rondino, Capriccio, Polacca, and Finale). It is scored for two horns, two flutes, strings and continuo. The manuscript is presently housed in the British Museum.

Chapter I discusses the editorial procedures used in preparing the edition, while Chapter II is an analysis of the composition.

Chapter III deals with the stylistic performance characteristics of the period and includes suggestions for the performance of the Partita. The factors taken into consideration are: 1) size of the ensemble, 2) tempo, 3) realization of the ornaments, 4) articulation, and 5) dynamics.

The composition in its edited form with the realization of the continuo part appears in the Appendix.

ABSTRACT

THREE USES OF PRE-EXISTENT MUSIC IN THE TWENTIETH CENTURY
William R. Braun
University of Missouri-Kansas City, 1974

The twentieth century has seen a great proliferation of musical styles. A technique common to several of these styles is the use of pre-existent music. It is the thesis of this paper that certain uses of pre-existent music have increased in the twentieth century.

Generally, the musical technique discussed in this dissertation can be labeled "quotations"; a word to distinguish uses of pre-existent music from cantus firmus, pasticcio, rearrangements, and theme and variations. Specifically, the technique analyzed is the "quodlibet" - an assemblage of pre-existent musical fragments; quotations of pre-existent music inserted into the midst of a composition; and parody - an entire composition based on pre-existent music. Fifteen works dating from 1908 to 1970 which fit the definitions of the three terms, quodlibet, quotation, and parody, are discussed from two different points of view. In Part One the apparent purposes for using pre-existent music are analyzed in detail. In probing the apparent purposes for using pre-existent music, this writer was led to delve into the historical circumstances of the works and the artistic philosophies and character traits of some composers. The results of such probing produced the following conclusions within each of the categories of purpose which comprise Part One:

Renewal. The historical phenomenon of musical revolution in both post-World War I and post-World War II eras, has caused some composers to seek renewal by drawing upon pre-existent music. Three works, however, Foss' Baroque Variations, Berlioz's Symphonie Fantastique, and Honegger's Sinfonia, demonstrate that the period after World War II appears to have been the more troublesome. These composers of a different generation from those who followed World War I turned to pre-existent music not in their search for material and inspiration but to fill a need for new compositional techniques, styles, and even personal identity.

Homage. Two homages to past composers, Stravinsky's The Fairy's Kiss and Hindemith's Symphonic Metamorphosis on Themes by Carl Maria von Weber, are often viewed as unimportant because they are anachronistic and lack historical influence. Instead, they should be placed in historical perspective and viewed as creative attempts of renewal after revolution.

Humor. The effective use of concentrated humor through quotation in Ibert's Divertissement is an extension of the Parisian artistic mood and throws into greater relief basic differences between nineteenth-century and twentieth-century artistic ideals. Such humor and unpretentiousness also highlights a division between French and German ideals in the first decade of the twentieth century.

While two works, Debussy's 'Golliwog's Cakewalk' and Bartok's Concerto for Orchestra, contain humorous quotations, both composers were led by their artistic conscience to satirize two contemporaries through quotation.

ABSTRACT

A COMPARISON OF TWO METHODS FOR TEACHING MUSICAL FORM TO SEVENTH GRADE GENERAL MUSIC CLASSES

James William Burton, Doctor of Musical Arts
University of Missouri-Kansas City, 1974

Many authorities agree that musical form should be an integral part of the music curriculum. In the review of related literature, it was established that musical composition might be able to motivate and facilitate increased cognitive knowledge in a general music class if it were taught as a means of understanding musical form rather than just as a mere skill.

The purpose of the study was to determine whether it is more effective to teach musical form in a seventh-grade general music class by using Method "A", which excludes musical composition, or Method "B", which includes musical composition. The null hypothesis formulated was that there is no significant difference in the mean average scores on a cognitive test of musical form between persons who used Method "A" from those who used Method "B".

Two seventh-grade general music classes of the Raytown South Junior High School, Raytown, Missouri, were selected as the student population for the experiment. One of these classes was selected arbitrarily as the control group, while the other class served as the experimental group. At the beginning of the experiment a pretest was administered to both the control and experimental groups. The control group's instruction included twelve fifty-minute periods of binary, ternary, and rondo form, whereas the experimental group's instruction included six fifty-minute periods which were as identical as possible to the control group, and six fifty-minute periods which were based on musical composition and performance of binary, ternary, and rondo forms. Following the twelve period unit on musical form, the posttest was administered to both groups as posttest.

In comparing the t-values derived from the pretest-posttest scores of both the control and experimental groups, it was found that both methods showed a significant shift (pretest-posttest) in mean scores at the .01 level. When the pretest scores of the control and the experimental groups were subjected to the test of significance, there was no evidence of a significant difference at the outset of the experiment. In subjecting the posttest scores of the control and the experimental groups to the t-test of significance, it was found that the t-value fell between the .10 level and the .05 level, thus the null hypothesis was not rejected.

Based on the mean posttest scores, there was no basis to reject the hypothesis that Method "B" was as effective as Method "A"; however, the standard deviation for the control group decreasing by .127 and the standard deviation of the experimental group increasing by .31, indicated that the effect of Method "B" on the individual subject was more diversified in the latter. Judging from their average scores, the experimental group gained as much cognitive knowledge in half the time plus an added dimension that of musical composition, it is recommended that educators use Method "B" over Method "A".

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ABSTRACT

THREE KEYBOARD CONCERTOS OF J. C. HOFFMANN (1726-1782)

John D. Kelly, Doctor of Musical Arts
University of Missouri-Kansas City, 1974

Manuscript number 14350 in the Staatsbibliothek der Stiftung Preussischer Kulturbesitz, West Berlin, contains eleven keyboard concertos whose title pages assign authorship to Georg Matthias Monn. Stylistic differences, however, separate Concertos 2 (B-flat major), 3 (A major), and 11 (B minor) from the remaining eight. Wilhelm Fischer in the Preface to volume thirty-nine of the Denkmäler der Tonkunst in Österreich and Ingrid Kolbacher in Die Musik in Geschichte und Gegenwart have therefore attributed authorship of these three concertos to the Austrian composer, Johann Christoph Monn, the younger brother of C. M. Monn. All the concertos have three movements and require an accompanying orchestral ensemble of 12. Violin/Viola/Vi Bass.

The dissertation is in two volumes. The introduction to volume one identifies the manuscript and lists editorial procedures. The topic for chapter one is late eighteenth century performance practice, and chapter two is a discussion of formal aspects in the first movements. Chapter three is devoted to style characteristics in the concertos and conclusions. Volume two is a modern performance edition of the three concertos.

ABSTRACT

THE NATIONAL ENDOWMENT FOR THE HUMANITIES AS RELATED TO INTERDISCIPLINARY HUMANITIES PROGRAMS IN SELECTED COLLEGES OF THE UNITED STATES

Oliver Bovler, Doctor of Musical Arts
University of Missouri-Kansas City, 1975

There is today at all levels of education a growing interest in humanities programs. The motivation of this interest can be attributed partly to the National Endowment for the Humanities which was established with the National Foundation on the Arts and the Humanities Act of 1965. The purpose of this dissertation is to determine the administrative procedures and types of programs funded by the National Endowment for the Humanities, focusing on the six colleges and universities receiving large Educational Development Grants in fiscal year 1971, and to determine the role of music in these colleges and universities.

The administrative organization of the National Endowment consists of a chairman (appointed by the President for a term of five years), the Division of Fellowships, the Division of Research, the Division of Education Programs, the Division of Public Programs, and the Office of Planning and Analysis. A twenty-six member National Council on the Humanities is appointed by the President to assist the chairman on policies and grants. The council meets four times a year to evaluate applications and make recommendations for funding. Since the endowment must be representative, it supports projects of public interest and relevance in addition to more traditional studies which focus on pure scholarship and general knowledge. There are virtually no limits to the kind of humanistic projects open for Endowment support, but all must be of superior quality and are judged on a competitive basis.

Educational Development Grants are designed to extend the impact of the humanities on the academic life of a total institution. The colleges and universities which received the first large Development Grants were the University of Denver, Bennett College, Manhattanville College, Wilmington College, Less Junior College, and the Pennsylvania State University Medical College.

In awarding a Development Grant the Endowment takes into account the feasibility of the development plan and its suitability to the particular needs of the institution. Although the primary goals of the six institutions in the study were the same (to develop effective methods of teaching the humanities), each institution based its curricular design on the backgrounds and interests of the students, the talents of the teachers, and the location and environment of the community. In the majority of the institutions receiving Development Grants it was necessary to break with tradition and move in new directions. Curricular innovations include the abolishment of course distribution requirements and the cumulative grade point system, provisions for students to plan and implement their own academic program, reorganization of grading and evaluation, the use of the community as a learning laboratory, and emphasis on independent study and personnel counseling.

Realizing that traditional college curricula, in which disciplines are taught in isolation as autonomous subjects, have failed to acquaint students with a total picture of man's civilization, the majority of the institutions in the study chose an interdisciplinary curriculum as a new approach to education in the humanities.

In each of the six colleges music is included as one of the disciplines in the humanities curriculum. However, inconsistencies appear in the extent of its utilization. In some of the colleges music receives strong emphasis, while in others music is placed secondary in the field of humanities and given minimal treatment.
ABSTRACT

THE FACTORS PRESENT IN THE TRANSITIONAL MUSICAL VOCABULARY OF ALEXANDER NIKOLAYEVICH SCELABIN WHICH SUGGEST LATER COMPOSITIONAL TECHNIQUES: AN ANALYSIS OF THE COMPOSER'S FOURTH, FIFTH, AND SIXTH PIANO SONATAS

Arthur E. Rinhardt, Doctor of Musical Arts
University of Missouri–Kansas City, 1975

Alexander Scriabin's musical vocabulary changes significantly from that found in his early works to the harmonic language apparent in those compositions written in his later years. Probably the major factor precipitating this change is the composer's interest in the philosophical ideas in vogue at the time, and consequently, his own attempts to synthesize the musical elements of his works into a sensuous experience for the listener. In this respect, Scriabin is clearly a product of both his Russian heritage and of the era in which he lived.

The purpose of this study is to examine those musical factors which clearly delineate the transition of Scriabin's compositional style. This is accomplished through analysis of the Fourth, Fifth, and Sixth Piano Sonatas; the procedure followed is a verbal discussion of the analysis and illustration of significant musical factors through examples taken from the music itself.

Musical factors present in the Fourth, Fifth, and Sixth Piano Sonatas suggesting more current compositional trends are, almost without exception, harmonic in nature; consequently, the study is confined to a discussion of harmonic factors observed in all three sonatas, and to Scriabin's serial technique as observed in the Sixth Sonata.

The Post-Romantic harmonic language based on tetrachords and the acceptance of traditional key centers and root movements, as observed in the Fourth Sonata, changes in the Fifth to a quasi-impressionistic vocabulary based on frequent use of the mystic chord and whole-tone sonorities. Functions of ninth, eleventh, and thirteenth chords are successively carried farther beyond that found initially in the Fourth Sonata; a unique use of the augmented sixth chord is noted, and increasing importance is assigned the tritone relationship. In the Sixth Sonata, limits of key are expanded, a key signature is abandoned, a very general tonal directionality is apparent, and an experimental serial technique appears.

The most important factor in these sonatas, however, is the development of the 'mystic chord', a sonority built in fourths upon the upper partials of the overtone series. The chord, which has an essentially dominant function in the Fifth Sonata, becomes the primary scalar and serial organization in the Sixth. Scriabin's serial technique, however, varies from that of either early Schoenberg or of Hauer; Scriabin's set is a chord-center; non-chord tones are often introduced, both in the manner of non-harmonic tones in traditional harmony and as modal variants; non-repetition of tones is not emphasized to the same degree as is the case with the other two composers. Irregularities of spelling are frequent. The composer's use of transposition as a method of expanding musical material and developing musical ideas is also unique. As observed in the Sixth Sonata, the most frequent transpositions of the set occur either at the tritone or at the minor third. Set transpositions also directly affect the formal structure of the sonata; thematic subjects are grouped through transposition into a kind of one-movement cyclic work.

Through analysis of these three sonatas one can trace the change which occurs in Scriabin's style. Analysis reveals a significant, if obscure, way in which musical material may be organized when traditional tonal functions are lost. Because the sonatas chosen for study are representative of Scriabin's two different harmonic styles, they show both the possibilities and the limitations of his harmonic explorations.
ABSTRACT
A DESIGN FOR COMPREHENSIVE MUSICIANSHIP
IN THE SENIOR HIGH SCHOOL BAND PROGRAM
Roger M. Warner
Washington University, 1975

The dissertation is a descriptive account of a year exemplary high school band performance program implemented by the author in the University City, Missouri public schools from 1970-1972. The pilot program, funded in part by the Contemporary Music Project (CMP), represented an attempt to re-structure the organization, curriculum content, and teaching strategies of a previously traditional band performance program to serve as a vehicle for providing students with a wide range of performance proficiency abilities, a curriculum which would develop a deeper and broader understanding of music as well as a higher standard of excellence in performance. Providing impetus, in part, for the program were social and cultural changes occurring as a result of the integration of Blacks into a previously all White, predominately Jewish school system. Modifications of the organizational structure included: creating a two-band format, moving the marching band out of the regular curriculum to function as an after-school activity and re-structuring the before and after-school sectional/ensemble program to include composition group activities and electronic synthesizer music instruction. The curriculum content was organized around a core of band literature repertoire representing many styles and periods for which lesson units were designed and implemented. Large and small group rehearsals served as learning laboratories for integrating performance, analysis, and composition experiences. A conceptual base (the common elements approach) was used as an organizing thread in providing direction in musical experiences which were to synthesize musical understandings with improved performance practices. In the second year, the project participated in the SCM Program (Symposium for the Evaluation of Comprehensive Musicianship) which assessed the effectiveness of CMP programs in changing musical behaviors of students in relation to the instructional goals established by the teacher. Based on subjective teacher observation, student response, SCM evaluations and performance results, the author concludes that the integration of CMP curriculum planning and teaching strategies into the band performance program contributed significantly to the realization of many of the goals set. Further long term pilot projects, experimentally designed, are recommended for the purpose of testing whether or not the goals as well as the strategies are indeed more effective than more traditional approaches to band performance.

ABSTRACT
MELANGE DE CHANSONS: TRANSCRIBED AND EDITED, WITH COMMENTARY
Stephen H. Curtis
Washington University, 1975

The Mélange de chansons tient des vieux auteurs que des modernes (Paris: Le Roy et Ballard, 1572) is an anthology of 148 secular pieces, all but one of which are settings of French texts. The collection represents 25 composers whose works span approximately 50 years. In general, the Mélange is a final tribute to the Franco-Flemish polyphonic tradition from the time of Josquin des Prez to that of Claude Le Jeune; yet within that tradition are clearly diverse styles. Volume I of this dissertation deals with a statement of editorial procedure and extensive notes on all pieces. Volume II consists of modern transcriptions of all pieces. The chief consideration of this edition has been the presentation of the text and its underlay. Detailed information is given with regard to standardization of orthography and principles of syllabification. For the problem of text underlay, the chief source has been a treatise by a German theorist of the Renaissance, Gaspard Stocker. In his De Musica verbae libri duob. (1570-1580), Stocker provides an extensive discussion of rules for the application of text to music. These rules form the basis for the treatment of the question in this edition. In addition to numerous isolated examples, one chanson is analyzed in detail to illustrate the principles employed. Critical notes are supplied for all pieces in the collection. These notes include modern editions and bibliographical references, if any; the literary text is full; notes and amendments for text and music.

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ABSTRACT

IL TERZO LIBRO DELLE DIVINE LODI MUSICALI
DI GIO. BATTISTA NICCIO

An Urtext Edition

John Paul Jackson
Washington University, 1974

This edition of fifty-one works has been conceived for the use of scholars and performers alike, and includes vocal sacred concerti, instrumental canoni, and a sonata, all for one to four parts. It is based on, and closely adheres to, the original publication of 1620, a copy of which is now in the Stadt- und Universitätsbibliothek, Frankfurt.

All editorial material appears in brackets or parentheses and includes basso continuo figures, fletta, and corrections of pitch, rhythm, and text errors.

The accompanying commentary includes information on the composer and his output, the manuscript with facsimile examples of the original title page and dedication, the texts with corrections and translations, a discussion of performance practice, a section of critical notes, and a bibliography.

An appendix of several examples of the same piece, each realized to suit the idiom of a particular instrument, is provided to illustrate basso continuo practice.

ABSTRACT

THE ORGAN IN SYMPHONIC ENSEMBLE

Marie Johanna Kramer, Ph.D.
Washington University, 1974

This is a study of orchestral works using the organ in the instrumental ensemble. The works are discussed in chronological order so as to observe the overall development of the use of the organ in the symphonic ensemble, to facilitate making comparisons between contemporary composers, and to observe the manner in which individual composers used the organ in symphonic works over a long period of time.

The earliest orchestral works using the organ in the ensemble, date from about the mid-nineteenth century and composers have continued to write works including the organ in the ensemble up to the present time. The present study includes works dating from the mid-nineteenth century through the 1960's.

The study does not include vocal works with an orchestral accompaniment including organ, or organ concerti in which the organ is used as a solo instrument. It is primarily concerned with the various ways in which the organ is used in combination with the other instruments of the orchestra. In general, the organ is most effective in the ensemble where it is used for some special reason, e.g., for a choral or plainsong melody, or for the purpose of creating a church atmosphere, or for sustained tone clusters, etc.; for an independent part within the orchestral texture, for reinforcement of the full orchestra at a climactic point, or for sustaining long chords. A brief discussion of the types of organ available in concert halls is included in the final chapter.

Appendices give a listing of works using organ in the symphonic ensemble, including instrumentation and place and date of first performance if known; a chronological listing of works, a listing to show how extensively the organ is used in each work; a listing by nationality of composer; a listing of types of composition; and a listing showing special uses of the organ, e.g., for choral melody, tone clusters, etc.
ABSTRACT

SONATE CONCERTATE IN STIL MODERNO BY DARIO CASTELLO: A TRANSCRIPTION OF BOOK 1

Richard Douglas Longley, Ph.D.
Washington University, 1974

Although few details concerning the life of Dario Castello are known, there is evidence linking him to San Marco in Venice during the tenure of Claudio Monteverdi as maestro di capella. Two sets of sonatas called Sonate concertate in stil moderno were originally published in Venice in 1621 and 1629. The second book was dedicated to Ferdinand I, Holy Roman Emperor. A motet, "Exultate Deo", is the only other work by Castello that is known to exist. This was included in a collection of vocal works, Gloriarum Sacra, which contained works of the same genre by other composers such as Monteverdi and Gasparo Locatelli, and which was published in Venice (1635 and 1636). The two books of sonatas were reprinted in Venice, each on two separate occasions between 1619 and 1628. During this period they were reissued in Antwerp, Book 1 in 1658 and Book 2 in 1659. Francesco Castello, reputedly the brother of Dario, is reported to have been a violinist at the ducal court in Mantua at a time when Salomone Rossi was in service there, and possibly prior to the departure of Monteverdi, who in 1613 was to hold a similar position, that of maestro di capella, at San Marco, where Dario Castello was himself to become a protégé sometime between 1625 and 1629. Francesco Castello was in 1628 engaged by Heinrich Schütz as Concertmaster for the Electoral Court in Dresden to which Carlo Farina was also attached.

Dario Castello's instrumental works would seem to be of historical and stylistic interest, a view which is shared by a number of writers and scholars in the field of music. The first book of sonatas, which is presented in transcription, evidences many traits which characterize both books. These works exhibit stylistic versatility and a diversity of instrumental combinations, and are generally influenced by the Italian instrumental canzone, demonstrating contrasts of tempo, meter, mode, texture, structure, dynamics and ornamentation. Contrapuntal and note-against-note writing are freely interchanged and combined; and rhythmical imitation, overlapping cadences, stylized dance traits, echo devices and terraced dynamics are notable features. The composer specifies an instrument or a particular choice for each part and indicates organ or spinet for realizing the continuo. The writing is modal as well as tonal and sudden chromatic shifts are characteristic of many passages. The development of tonal concepts, harmonic freedom, the use of time signatures which have modern implications, and proportional signatures affecting tempo and rhythm but devoid of proportional significance between concurrent parts, all attest to the presence of progressive elements. Thus the implications of the term concertato and of the expression stil moderno are borne out in the treatment of these works. Solo passages which occur throughout are frequently florid and require a degree of virtuosity which, among other things, supports the feeling of equal partnership between instruments of the ensemble.

The dissertation is presented in two parts: the first deals with the composer and his works, historical background, stylistic and other characteristics of Book 1, as well as the basis for the transcription. A microfilm of the first book reprinted by B. Magni, Venice, furnished by the Bodleian Library, Oxford, is the source for the transcription itself, which is presented in Part II.

THE CONCERTO AND RELATED WORKS FOR LOW BRASS: A CATALOG OF COMPOSITIONS FROM C. 1700 TO THE PRESENT

Robert Melvin Miller
Washington University, 1974

This dissertation is a catalog of about 500 works for a solo low brass instrument, i.e., trombone, bass trombone, tenor horn, baritone horn, euphonium or tuba; accompanied by orchestra, chamber orchestra, wind band, jazz band or chamber ensemble. Also included are works for a concertante ensemble which includes one or more low brass instruments in a sinfonia concertante, e.g., a concerto for brass quintet and orchestra.

Information about these works comes from a variety of sources, but most important is Hofmeister's Jahreshervielbild (Leipzig, Frankfurt a.M., Hofmeister, 1844-), a catalog of music published in German speaking countries from before 1844 to the present. In addition, publisher's catalogs and reference works such as the ASCAP Symphonic Catalog (New York, ASCAP, 1966) were very helpful.

A mailing was also sent worldwide to conservatories of music and the information obtained from this is included in the catalog.

There is a historical introduction which examines the solostic use of the trombone from c. 1600 through the nineteenth century. Musical examples of this solostic use are presented, e.g., early seventeenth century passagio, the early seventeenth century Italian trio sonata, the German church sonata before 1800, eighteen century Austrian sacred vocal music and eighteenth century concertos for alto trombone and orchestra. General information on the use of the trombone from 1760-1830 is included as a background to its solostic use in the nineteenth century. There is also some discussion of trombone sonatology as well as information on the ophicleide.

The catalog is organized by country and by medium, e.g., works for trombone, works for instruments other than trombone and works for low brass which are transcriptions or arrangements of other compositions. There are also indexes for composers and instruments as well as complete reference information.

A recent catalog of works for tuba, the Tuba Music Guide by T. Morris (Evanston, Ill., Instrumentalist Co., 1973) is quite complete and so this catalog omits all works for tuba mentioned by Mr. Morris.

It is hoped that this catalog will be a reference source for low brass teachers and performers.

BEST COPY AVAILABLE
ABSTRACT

DOUBLE QUARTET, JANUARY 1973

Gary Lee Nelson, Ph.D.
Washington University, 1973

DOUBLE QUARTET, JANUARY 1973 is a composition for vibraphone, clarinet, trombone, double bass, and quadraphonic electronic sound. The work was composed with the aid of COMPOSE, the author's computer program for musical composition.

COMPOSE generates compositions which reflect the application of compositional procedures and constraints that are supplied by the composer/programmer. In DOUBLE QUARTET, those procedures were applied to the composition of horizontal and vertical density, registral distribution and contour, amplitude, and interval content in linear and harmonic constructs.

The work is cast in the form of an arch with a peak at a point two-thirds of the way through the composition. This peak is achieved through a controlled development of density, register, and amplitude. The taped electronic sounds constitute the two lower layers of a three-layer texture. The live performers constitute the top layer. The three layers enter canonically and attain their greatest energy at the peak of the arch.

The interval context of linear constructs was determined by tables of transition probabilities for a limited set of interval sequences. Harmonic constructs were controlled through interval vector analysis.

The electronic sound was generated using MUSICAL, a program for digital sound synthesis that was implemented by the author at the Purdue University Computing Center.

ABSTRACT

ANTON WEBERN'S FIVE CANONS, OPUS 16: A TEST CASE FOR COMPUTER-AIDED ANALYSIS AND SYNTHESIS OF MUSICAL STYLE

Gary Lee Nelson, Ph.D.
Washington University, 1973

The focal point of this essay is the pitch structure of Anton Webern's Five Canons, Opus 16 (1924). For the purposes of this study, the three-part canons in Opus 16 were viewed as alternate realizations or variants of the same structural plan.

Computer programs were written (in FORTRAN) to convert musical information into a numerical code which is suitable for computer processing (CANON1 program), to scan Webern's score for linear relationships and melodic contour (CANON2 program), and for harmonic structure (CANON3), and for variants resulting from transcription and/or inversion of one or more of the individual parts without violation of the constraints which were formulated through harmonic analysis of the original score (CANON4). The final phase of this study was the creation of a program (CANON5) that employs the output of the analysis programs to generate variants that are stylistically similar to Webern's compositions. The high degree of order in the style of Opus 16 is demonstrated statistically and the accuracy of the analysis programs in capturing that style is demonstrated with the aid of computer-generated performances and computer-printed scores of the computer-composed variants.

The main body of this essay is devoted to a description of the programs mentioned above and to a discussion of the analytical and compositional processes which they embody. The appendices include listings of all programs used in this study, complete tables of data produced by the programs, and computer-printed scores of the variants. An audio tape of the output of the composition program is available from the author.
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Contributions to this journal should be sent to Jack Stephenson, School of Music, University of Missouri--Kansas City, Editor. Authors should observe the following rules in preparing their manuscripts: The editors welcome contributions of scholarly, historical or scientific nature which report the results of research pertinent in any way to instruction in music as carried on in the educational institutions of Missouri. Articles should be typewritten, with double spacing throughout, including footnotes, long quotations, and itemized lists. Footnotes should be placed consecutively at the end of the article, beginning on a new page, using triple spacing between notes. Authors reporting quantitative studies may substitute a list of references for footnotes in accordance with practice followed in many scientific journals. In all instances, manuscript style should follow recommendations made in the MLA Style Sheet. The Chicago Manual of Style should be followed in setting up tables, charts and figures, which should be numbered and placed on separate pages.
N.B. All contributors are advised to keep a copy of any manuscript submitted. The Editorial Committee cannot be responsible for loss of manuscripts.

Published by Missouri Music Educators Association

Editor's note: Having served as founder and editor of this Journal, starting fifteen years ago, it has occurred, perhaps a bit belatedly, to this editor, that it is an appropriate time for new blood. With the approval of Claude Smith, President of the MMEA, Jack Stephenson will take over the position of editor starting with Vol. IV, Number 1, 1977. It has been an honor and privilege to have served these many years as editor of the first of the state journals of research in music education. This editor is grateful and happy in turning over the job to such a capable scholar as Jack Stephenson.

PREFACE

The Missouri Journal of Research in Music Education, published by the Missouri Music Educators Association, is devoted to the needs and interests of the school and college music teachers of Missouri and the nation. This issue, Volume III, Number 5, is the fifteenth to appear in as many years.

The members of the Editorial Committee are grateful to those readers who have written suggestions concerning the content of past issues and request that criticisms and suggestions, always welcome and never unheeded, again be sent to the Editor concerning the content of this issue. We strive for a reasonable balance among music theory, history, philosophy or aesthetics, and pedagogy. It is difficult to judge how successful we are without reader response.

Since this publication is not copyrighted, complete articles or excerpts from articles may be made without securing permission from the editor or the authors. It is requested that credit be given to the Missouri Journal of Research in Music Education.

We express our deep gratitude to the Missouri Music Educators Association and to its president, Claude Smith, for so generously shouldering the Journal's financial burden to make it possible to continue to publish the Missouri Journal of Research in Music Education.

The Editorial Board
THE INFLUENCE OF GESTALT PSYCHOLOGY ON ELEMENTARY MUSIC EDUCATION AND PEDAGOGY--
Proposals for a Curriculum (K-6)

René Boyer
Washington University

INTRODUCTION

Current trends in curriculum construction and pedagogy seem to stress a total approach to music education in contrast to previous traditional curricula which were designed to place emphasis on one or several of the aspects of the discipline. Elementary music curricula have traditionally been characterized by divisions into separate and individually treated components such as music reading, singing, listening, playing, and rhythm. In contrast, recent innovations, including such curricula as the Manhattanville Music Curriculum Program, the Comprehensive Music Project, and the subsequent outgrowth of it in the form of the Hawaii Music Program, tend towards not only an amalgamation of the skills mentioned above, but stress the conceptualization of these skills, which will later be pointed out serve as the fundamental factor in the development of the child's musical growth. Such trends have a basis for their "raison d'être" the concept that philosophy should provide the framework for our approach to new developments in music education. As McMurray states in his article, "Pragmatism in Music Education,"

It would seem that the attitudes we take toward education must reflect our beliefs about what kind of world it is we inhabit and ... Since beliefs of that kind are peculiarly the province of philosophy which provides our most basic understanding.2

A consideration of the theory of Gestalt and its application to current teaching procedures and curriculum development seems warranted in view of the benefits which the approach can provide in furnishing a more effective program for the musical growth of children.

A BRIEF DESCRIPTION OF THE THEORY OF GESTALT

Gestalt psychology, so called because of the emphasis it places on configuration and structure in experience, began with the work of the German scholars, Wertheimer, Koffka, and Kohler who, initially, were mainly concerned with the phenomena of perception.3 In his perceptual studies of 1912, Wertheimer discovered that two visual stimuli that followed one another in rapid succession, did not produce two individual movements in the visual field, but a single pattern of uniform movement from the first to the second stimulus. This uniform movement was not a property of the physical stimuli, hence it was attributed to the act of perception itself. Wertheimer called this perceptual illusion the phi phenomenon.

It was this interest in the phi phenomenon that eventually led to the basic postulate of Gestalt psychology, which Wertheimer stated as follows:

The fundamental "formula" of Gestalt theory might be expressed in this way: There are wholes, the behavior of which is not determined by that of their individual elements, but where the parts themselves are determined by the intrinsic nature of the whole. It is the hope of Gestalt theory to determine the nature of such wholes.4

The concept that the whole is greater than the sum of its parts and that the parts derive their identities from the whole are evident in this statement by Wertheimer and form the principal tenets of Gestalt theory.

Every whole or Gestalt, can be considered as an object placed against a background which together facilitate total perception. The object then becomes the new and concrete aspect of the perceiver's experience, whereas the background is that constant part of his environment against which the object stands in relief. As Koffka explains:

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The figure [object] depends for its characteristics on the ground [background] on which it appears. The ground serves as a framework in which the figure is suspended and thereby determines the figure. . . . we can demonstrate the framework character of the ground by its influence on the shape of the figure.5

Object and background, with the particular perceptual experience that results from their unique relationship, comprise the Gestalt. Despite the fact that Gestaltists view structure produced by experiences in the present as the primary factors of the learning process, they nevertheless account for the influence of past experiences in what has been defined as the trace theory. A trace is representative of a past experience which persists in the brain and facilitates transition from one experience to the other. The ability to choose a trace and cause it to function in proper relation to a present situation is called a trace process. The trace and the trace process are viewed as two phases of learning and the trace system or groups of related traces are continually being modified by the effects of present experiences. This modification can take place in four different situations as Koffka explains in his Law of Pragnanz.6

In the first situation described by Koffka as one of similarity, the trace process is activated because the perceiver recognizes the likeness between a particular trace and the present perceptual experience. When proximity (the second situation) is involved, the traces will be recalled in proportion to their closeness in time to the new experience. With the third situation termed closure, there is a tendency on the part of the perceiver to complete partially-formed figures by the addition of traces, a process which leads to a sense of satisfaction. Finally, good continuation is the result of the organization of objects according to their symmetrical or regular configuration. It is the combination of these processes that result in the ability to perceive, conceptualize and ultimately acquire useful knowledge about the universe.

For Gestaltists then, learning is a question of insight—the sudden comprehension of those qualities of a situation which are grasped by the ability to perceive the figures and structures of which it is comprised. Certain characteristics of this type of learning become apparent and among them are the following: Insight learning depends for its effectiveness on the development of the capacity to perceive; such capacity can only be gained through experience, and is contingent upon the arrangement of situations into structures that are easily perceived. The solutions achieved through insight can be repeated either in similar conditions or in new situations. In other words, the solutions represent concepts that are transferrable.

When once such capacity has been achieved, the student can then confront his learning task as a whole, being able to perceive its intrinsic relationships and subsequently proceed to an analysis of its parts. The final step in this synthesis-analysis-synthesis sequence will be the perception of the whole with more complete understanding. Thus illustrating the Gestalt concept that "the whole is greater than the sum of its parts."

In summary, the Gestaltists concluded from their studies, that a crucial factor in determining clear perception was the individual's own structuring of the sensory field. Consequently, when they later applied to learning, the laws relating to perception, they claimed that the individual's inner experiences and his striving to organize stimuli into harmonious, meaningful patterns (wholes) were central factors in the learning process. For them, learning was believed to occur when all the relationships in a situation were perceived as forming an organized pattern (or gestalt). It was this appreciation that induced insight, and with insight the problem of perception was solved and learning accomplished.

In the light of the discussion of the foregoing theory, it will be understood that concepts of the musical dimensions, important as they are to concepts of musical style and form, must include a conceptualization of the relationships between the various dimensions as well as the relationships of values within each single dimension. This is necessary if the very essence of the musical experience is to be a part of the
learning process and if music is to be perceived as a total experience.

Consequently, it becomes evident that when perceiving music, no single element of sound or isolated organizational scheme should stand alone. For example, pitch is relative to timbre, rhythm to dynamics, simultaneity to duration, timbre to tempo, form to texture, and melody to structural balance. We hear and we know by developing a sensitivity to the totality of the music. It is of extreme importance in the music curriculum that this concept of totality be evident in every musical experience that the child undergoes. Musical factors such as those just mentioned above should never be totally separated from the musical settings which give them significance. A fragmented study can only produce distorted perspectives. While in any educational strategy the primary focus may be on any one concept such as pitch, repetition, clusters or pulse, the relationship of that concept to the total work, must be maintained. An exclusive study of form, harmony, orchestration, melody, or any other isolated musical factor tends to restrict itself to the limits defined by that particular factor. All educational experiences of a program therefore, must deal with the relative roles of music factors in total musical settings. In short, no single concept or contrived theoretical division of musical thought should be separated from the totality of music and treated as an entity divorced from the musical scene.

GESTALT PSYCHOLOGY AND ITS INFLUENCE ON MUSIC EDUCATION--THE PSYCHOLOGISTS

This section of the paper will summarize the accomplishments of those psychologists who, having used Gestalt principles, at least in part, as a basis for their philosophies, have proven to be of particular importance in the elaboration of the music curricula. In addition, possible approaches will be suggested for the modification of a program based on Gestalt, that can be used by the music specialist and applied without undue difficulty to the development of the child's conceptualization of music as a whole.

MURSELL

Among those psychologists, James L. Mur- sell, as can be evidenced from his numerous writings, has greatly enhanced our knowledge in the fields of music philosophy and education. His contribution to music education was the construction of a systematic overview of the curriculum with procedural application using psychological principles of Gestalt psychology. Although he used these principles, they were modified in such a way that when applied to music education, emphasis was not placed on the accumulation of habits or knowledge items, and on other external manifestations of musical experience, but rather on the essence of the materials. The basis of the music program in developmental teaching, as expounded by MurSELL, is music itself. It puts "...absolute priority on musical perception, musical thinking, and musical imagery." Murrell further concludes:

It means giving the pupil a grasp of this inner, living essence right from the very start, and seeing that his grasp of it improves as he works at this, that, or the other of its external manifestations.

Such emphasis upon the "essence of music" will permit the development of the type of curriculum that will have as its base an eclectic philosophical approach; in other words, a curriculum which will be based on the philosophical contributions of the other developmental psychologists who support the ideas of Gestalt psychology. This need for having an eclectic philosophy that will provide the rationale for the structuring of a total music program is emphasized by Charles Leonhard in an article where he stresses that:

Even though music educators have in recent years grown more receptive to philosophy, there exists no comprehensive philosophy of music education.
PIAGET

Of the other psychologists who have contributed to Leonard's goal of a broad eclectic base, Piaget seems particularly relevant to our considerations especially in view of his cognitive-developmental theories that have become increasingly the center of attention for those psychologists involved in educational development. Of the four basic assumptions that Piaget used as a basis for the construction of his developmental theories, the one outlined below seems most relevant to our concept of Gestalt as it relates to the elaboration of our proposed music curriculum:

Development involves basic transformation of cognitive structure that cannot be understood in terms of associative (S-R) bonds but must be explained in terms of organizational wholes or systems of internal relations.

Piaget proceeds to describe coherent stages in the direction and course of mental development. These stages of natural development have been used increasingly by those who formulate curricula for the construction of educational programs. According to his theory of "expectancy-probability", Piaget has identified four stages in the child's development as follows:

1. Sensory-motor-preverbal (birth to approximately three years). It is at this stage that a child learns from randomized behavior, repetition, and association.

2. Pre-operational stage (approximately three to six years). The child is influenced by irrelevant facts and does not yet distinguish between possibility and necessity, nor does he respond to unequal relative proportions in an experiment.

3. Concrete-operational stage (approximately seven to ten years). The child separates that which is necessary from the simply possible and in turn accepts multiple possibilities.

4. Formal-operational stage (approximately eleven years or older). This is the age the child begins to master concept of probability and acquires abstract mental or conceptual abilities.

It can be deduced from the foregoing stages outlined by Piaget that there is a direct relationship between age, maturation, and the complexity of learning. When viewed in relationship to music, this type of structuring is extremely useful in the development of a curriculum which stresses progressive complexity in the approach it adopts. It would be possible to introduce the child to the sounds of music in the beginning years (ages 3-6) through a variety of activities that lay emphasis on repetition and association. Although conceptualization is not likely to occur at this stage, according to Piaget, the child can become familiar with and be able to perceive the various dimensions of music by virtue of the kind of emphasis given through the activities.

Since at the concrete operational stage (ages 7-10), however, conceptualization occurs more readily, it is here that, if the outline by Piaget is followed, concrete experiences which involve the dimensions of music on a more complex level, should be provided. This would involve the presentation of the basic concepts of music which in the previous stage had been experienced through activities but had not been introduced in an abstract form. The child will then have moved from an exposure to music as a whole to the initial stages of an analysis of its parts. Consequently, in the formal operational stage, the student will now be better able to approach music as a totality since he will have become progressively familiarized with the "essence of music" through experiences which through maturation will have fostered his ability to conceptualize.

In essence, musical material can be presented as a totality at any stage of development, provided that the level of complexity is adjusted to suit the age of the student. By contrast with theories that stress stimulus-response, association and maturation, Piaget stresses the idea of "equilibration" - the notion that learning is an evolutionary process.
Based on the foregoing premise and through the reformulation of Piaget's growth theories, Jerome Bruner introduced the "spiral" or "cyclic" curriculum. This type of curriculum was founded on Bruner's hypothesis that "any subject can be taught effectively in some intellectually honest form to any child at any stage of development." He further clarifies this hypothesis by a twofold consideration that growth in knowledge of any given subject depends on conceptualization of the structural dimensions of that subject, and that a spiraling, cyclic arrangement of experiences with the structural dimensions and their interactions, from single to complex situations involving original manipulation of all the dimensions in a skillful manner is, in essence, the most effective arrangement.

His use of what he terms non-specific transfer—the application of a general idea to subsequent cases in which the idea occurs in a similar or non-similar learning situation—is reminiscent of the Gestalt trace process mentioned earlier by Koffka. This kind of transfer can only be achieved through knowledge of basic structural elements which the learner, by viewing their consistent modes of interaction, is able to formulate into general principles or concepts. As far as music is concerned, this would involve the stressing of its structural dimensions such as rhythm, pitch, timbre, and loudness. In addition, the constant interaction that occurs among these dimensions, must be illustrated.

This can be achieved through first introducing the child to music through a series of activities; second, by the development of the concepts involved in a rudimentary fashion, and third; by the presentation of those symbols which are traditionally used to represent the concepts. This is what Bruner refers to as inactive, iconic, and symbolic modes. This process of learning can best be arranged in sequence which should proceed from the simple to the complex in a spiraling, cyclic manner, providing recurring contacts with structural dimensions and their inter-relationships at successive levels. The possibility of grasping the basic dimensions of music by this process will permit an appreciation of the structure of music that facilitates the capability to relate it meaningfully to the different contexts in which it reveals itself.

In short, experience with the structural dimensions of music would proceed from exposure to the most basic identifying elements of a single dimension to a more complex ability to manipulate all the dimensions creatively and skillfully. Progression from simplicity to complexity takes place, not only within the subject matter as a whole, but within the comprehension of each single dimension. This reinforcement is one of the most crucial aspects in effective conceptual growth. As Bruner says:

... In order for a person to be able to recognize the applicability or inapplicability of an idea to a new situation and to broaden his learning thereby, he must have clearly in mind the general nature of the phenomenon with which he is dealing. The more fundamental or basic the idea he has learned...the greater will be its breadth of applicability to new problems.

Wheeler

Perhaps the figure who most succinctly summarizes our concept of the basis on which Gestalt curricula should be constructed is Raymond Wheeler, the core of whose philosophy can be summarized in his statement:

It is better to learn by the "whole method" than to divide the learning material into a number of parts.

By using the whole method the learner obtains, in the beginning, a general conception of the material by approaching it as a totality. Similarly, when this notion is applied to music education, the student will be provided with the opportunity to gain, initially, an overall insight into the specific tasks or the general program in which he will be required to participate.

For a more detailed study of an application of Wheeler's theory of Gestalt to the development
of a music program, the reader is referred to the doctoral dissertation of William N. Reeves, "An Exploratory Study of Two Sets of Learning Principles Derived from the Learning Theories of Guthrie and Wheeler as They Relate to the Development of Instrumental Musicianship," University of Southern California, July 1954.

GESTALT PSYCHOLOGY AND ITS INFLUENCE ON MUSIC EDUCATION--THE CURRICULA

Before suggesting the approaches referred to in the beginning of the previous section, it would be helpful to consider those programs already in effect which have used Gestalt, at least in part, as a basis for their development. The way in which they have been tied to the principles of Gestalt will be explicated in terms of the contributions of Mursell, Piaget, Bruner and Wheeler, as outlined in the previous discussions.

THE MANHATTANVILLE MUSIC CURRICULUM PROGRAM

This program, developed from 1965 through 1970, was encouraged and sponsored by the Arts and Humanities Program of the United States Office of Education. It is divided into two broad categories, the MMC Interaction^{20} and the MMCP Synthesis^{21}. The former was designed as an early childhood music learning plan to foster basic experience in musicianship for children of the pre-primary and primary grades. It has been used in a modified form at the elementary level as an introduction to the learning environment and laboratory activities outlined in the MMCP Synthesis. This program offers structure for music education beginning at the third grade and has been widely used in elementary, junior high, and college music programs.

MMC Interaction is based predominantly on sounds and music in aural form, with little emphasis being placed on notation of any kind. This is achieved by setting the student in an environment in which he is allowed to experiment with all sorts of musical sounds and sound reproductive systems. Listening, performance, and evaluation are fostered and the child is thus actively introduced to the world of music. The process is approached through several phases based primarily on Bruner's concept of the spiral curriculum. In the initial phase, there is a period of free exploration followed by one of guided exploration in which the child is first allowed and then guided to discover the variety of sounds that constitute his musical environment.

Subsequently, exploratory improvisation is attempted through extensive creative interaction of children with one another, and with numerous sound producing materials—a process which leads to new levels of awareness and insight. These experiences are then structured during the phase of planned improvisation when the students are encouraged to organize their newly discovered patterns and combinations of sounds into compositions which are expressive and aesthetically pleasing to them.

In the final phase of reapplication, the student learns to manipulate and organize the materials of music in ways that are designed to capture several different moods and feelings. In short, a new sense of being is discovered with the new found ability to create, evaluate, and experience sounds as the students desire.

The basic difference between MMC Interaction and MMCP Synthesis is that, while the former is essentially a process oriented with the experience of personal involvement as its goal, the latter stresses the development of concepts and skills as well as experience in the process of musicianship. It achieves this through focusing attention on all types of notation as well as the aural reality of music. The basic concept of the spiral curriculum continues to be adhered to as emphasis is given to the presentation and acquisition of materials and information on increasingly complex levels. In addition, the four basic principles and goals of the program are closely followed. These are dedication to a learning process of personal discovery through creative exploration, a primary emphasis on concept understanding, the relevance of contemporary musical thought and the avoidance of fragmentation in considering musical ideas.

Several of the major goals of the Manhattanville Music Curriculum are closely related to the principles of Gestalt as described in the
theories of the psychologists previously discussed. The idea of perception, for example, that is common to all of them, is evident in the desire of the program to have the child discriminate between various sounds and, by means of "analytical thinking," discern the manner in which they are arranged. This concept of perception is also stressed in relation to what is described as "judicial thinking"—the ability on the part of the student to determine whether his music or that of other students is being used effectively. The idea of perception can also be tied to the goal of "creative thinking" by which the student is encouraged to explore and consider alternative arrangements of the sounds with which he is working.

However, the above can only be achieved, as a Gestalt approach would stress, through the development of the child's ability to conceptualize. It is because of this that the MMCP emphasizes the discovery by the child of the basic concepts of sound manipulation and organization—the ability which will allow for order in interpretation and the development of intuitive, deductive, and inductive, thought.

The tenets of the program point out however, that the process of discovery of the concepts, should only be undertaken while exploring the interactive and expressive possibilities of sound. This is done in MMCP Interaction basically by active involvement through direct experience, while it is achieved in MMCP Synthesis through aiding the development and perfection of the symbolic language and the conceptual ideas of music.

However, music as a totality remains at the core of all of these endeavors for, as Ronald Thomas, Bissini, and Pogonovski point out,

It is the interaction of the various sounds and the totality of their influence on each other that determines the meaning. Musical understanding implies the ability to comprehend meaning from the total effect of these combined sounds.

COMPREHENSIVE MUSICIANSHP PROGRAM

In 1959 the Ford Foundation responded to what was considered a need to establish contemporary music in its rightful place within the national musical heritage by setting up the Contemporary Music Project. Through focusing attention on the fields of composition and music education, it was hoped to insure that proper standards would be produced and maintained in regard to the contemporary music setting. Several attempts were made to achieve this goal by placing composers in schools and establishing seminars to search for new ways and means to improve the music education program in public schools and colleges. It was discovered however, that there was a basic lack of knowledge of the fundamental theories and concepts of music education as they relate to its contemporary expression.

This "vacuum" was seen to stem from a deficiency in teacher education and as a result, it was proposed at the concluding seminar at Northwestern University at Evanston, Illinois in 1965, that a comprehensive program be instituted. This was done to assure that future teachers in all areas of music education be given a broad conceptual and practical knowledge of music. This would allow them to understand, for example, the compositional principles that underlie any work, to be able to communicate such principles to their students, and to apply those principles in teaching the various components of music such as theory, performance or history. The results that would accrue from the principles and practice of such comprehensive musicianship would be beneficial to the improvement of the music program from Kindergarten through the graduate school.

The result of this recommendation was the establishment of the Comprehensive Musicianship Program, which was designed to formulate the kind of undergraduate curriculum that would foster the achievement of the above goals. However, the Comprehensive Musicianship Program did not propose the introduction of new courses but merely restructuring of existing ones to conform to what would be considered a Gestalt approach. It is to be pointed out that emphasis would be placed on the interrelationship that should exist between
the constituent elements of the field of music: theory, history and literature, and performance. Such interrelationship is clearly outlined in the following premise which have been indicated as being necessary to the development of the curriculum:

1. The content and orientation of musicianship training should serve all music students regardless of their specialization.

2. Comprehensive musicianship training incorporates conceptual knowledge with technical skills to develop the capacity to experience fully and the ability to communicate the content of a musical work.

3. The courses in musicianship training should be designed to synthesize knowledge acquired in all other musical studies.

4. All musicianship studies should relate contemporary thought and practices with those of former times.

5. Musicianship courses should be considered as evolving and open-ended disciplines. The student must be given the means to seek and to deal with materials outside and beyond his formal education in music.

6. The relevance of musicianship training to professional studies should be made clear to the student. The clarity of purpose may be achieved if musicianship training is based on students' own musical development and expressive needs.

7. Courses constituting comprehensive musicianship training are directly related to each other. The study of any specific matter need not be confined to a given course but approached in several ways in other complimentary disciplines.

The emphasis which has been laid on the ideas of conceptualization and synthesis as indicated in the above quotation, is cardinal to the theory of Gestalt which stresses that the approach to any discipline, through first considering it as a totality, enables the learner to grasp fully its significance and see the relationships between the constituent parts. As David Willoughby adroitly concludes in his study Comprehensive Musician and Undergraduate Music-Curricula:

The essence of comprehensive musicianship is closely related to Gestalt psychology: music is approached as a totality, with a concern for constituent parts as they relate to the whole. Learning is considered to be an exploratory enterprise rather than either a mechanistic or atomistic process; and learning is identified with thought and conceptualization rather than with the connections of specific stimuli.

THE HAWAII MUSIC CURRICULUM

The outgrowth of the principles and objectives of the Comprehensive Musicianship Program as they can be related to the public school music program, comes with the establishment of the Hawaii Music Curriculum. This program, designed for students of kindergarten through grade twelve, stresses the interdependence of musical knowledge and musical performance through the concepts of tone, melody, rhythm, harmony, tonality and form. These concepts are approached through a variety of musical activities that are arranged in such a way as to provide constant expansion and reinforcement at different stages of their treatment—in essence, the Brunerian concept of a spiral structure.

One of the major approaches used in the program is the selection and use of choral materials which are especially chosen because they possess certain characteristics which can be directly related to the concepts to be taught. The choral materials are divided into two basic groups, the first illustrating single musical ideas, with each group being used at the stage appropriate to the maturation of the student.
This idea of maturation can be tied directly to the growth theories of Piaget and the relationship of Gestalt is evident in the fact that the approach to the study of music stresses totality as well as the development of concepts. Through this method and the spiral structuring referred to, the student will be able to grasp the wholeness and essence of music.

PROPOSALS FOR A CURRICULUM--OBJECTIVES

In view of the considerations previously outlined, it becomes evident that the philosophy of any curriculum should be based on the belief that musical growth and independence are contingent upon the possession of those concepts that give an insight into expressive musical organization and consequently lead to the development of a child's total appreciation of the musical art. In order to incorporate these concepts into the curriculum however, it is necessary to develop a framework based on objectives which will serve as a foundation for a program specifically designed to be approached from a comprehensive (Gestalt) perspective.36

When viewing these objectives, our first consideration should be directed toward the need for the child to develop the awareness of "sound and silence"—the essence of music—in his environment. Music's first claim to a place in the curriculum lies in the simple fact of its very existence. If one function of education is to acquaint the individual with his environment, then music must be included, for it is an integral part of that environment and should, as a result, serve as a cardinal unifying factor in the child's education.

Second, having established in the mind of the child that "sound and silence" exists as an integral part of that environment, the development of a new ability within the student can now be pursued. This ability will focus on the realization that music exists today not only as a curatorial interpretation of historical times and other societies, but as a contemporary, living, and vital expressive medium. In a curriculum it should be stressed that music has always been sensitive to contemporary conditions and social structures. As society changes so do the external structures and expressive devices of music, but the intrinsic nature of the art remains constant.

The third objective of a curriculum is suggested in the above two, but relates music more explicitly to the intrinsic needs of man. In other words, the child must be aware that music can serve as a vehicle for man in search of individual creative fulfillment. A logical corollary would be an attempt to use the program being designed to create in the students an awareness of their individual musical abilities. It should be pointed out that each student will not necessarily achieve proficiency in all the media of musican expression, but that each one will be sufficiently exposed that he or she can develop fully an appreciation of the art.

Simultaneously, the fourth objective would insure that the student be provided with ample opportunity to put his knowledge to use. The power to act, to operate as a musician, is essential not only for its own value in allowing personal participation, but as a fundamental asset in the development of understanding. The student must develop his capabilities to create, to perform, and be otherwise actively involved in the various musical processes if he is to grasp fully the medium of the art.

Finally, in addition to the demand for active musical involvement, the child should be guided to the realization that the continuing nature of music as an art, demands use of a broad range of musical materials. Materials from past and present must be brought together in such a way that the child develops a clear and unlimited view of the art as a whole. This quality is not dependent on any one style of musical composition, for one work is but one moment in the evolution of the art. Whether a piece is forgotten in time or continues as a classic, the art remains and continues to evolve.

STRATEGIES

The objectives outlined above can best be achieved when presented to the child through a series of experiences. It should be pointed out however, that these experiences must be
communicated to the child on a level and in such a way that he or she will be able to grasp the concepts implied in their entirety.

The curriculum outline suggested in Appendix I is intended to provide a structure that will facilitate this kind of presentation. It is based on an organization of musical experiences that will serve as a foundation from which the child's ability to conceptualize the basic elements of music will develop. The separate presentation of these elements in the form of the concepts outlined in Appendix I is necessary because of purely typographical expedience. The two appendices are not to be treated as distinct programs but should dovetail to form an entity, permitting the concepts in the latter to be seen as vital and necessary factors that function in direct relationship to the experiences in the former.

The development of the child's ability to conceptualize is crucial to the function of this proposed curriculum. It is intended like any curriculum to present a series of activities, knowledge, skills and values, that are geared to alter the child's behavior in relationship to music. However, the teacher must be constantly aware that the presentation of concepts, devoid of any meaningful relationship to the area being treated, can result in a gap between intended and actual accomplishment. It is necessary therefore to insure that cognitive development take place within an experiential framework. As Ralph W. Tyler states in his Basic Principles of Curriculum and Construction:

... learning takes place through the experiences which the learner has; that is, through the reactions he makes to the environment in which he is placed. Hence, the means of education are educational experiences that are had by the learner. In planning an educational program to attain given objectives we face the question of deciding on the particular educational experiences to be provided, since it is through these experiences that learning will take place and educational objectives will be attained.

It is to this problem of providing the successful transition from the experiences to the abstract formulations to be derived from them, that the remaining paragraphs will address themselves.

SUGGESTIONS FOR A PEDAGOGIC APPROACH

A typical situation which illustrates the difficulties in this process would be that which involves the attempt to communicate the concept of notation to the student. One of the crucial features of notation is that it is capable of representing one or several of the following: pitch, direction, harmonic content, the duration of sounds and silences, the placement and structure of the beat, the key or the tonality. A great many of the problems faced in dealing with notation stem from the fact that pupils are not cognizant of this crucial feature in terms of direct and concrete experience. Students might well be aware that music rises and falls or that notes differ in length. Their feeling for the beat, key, and harmonic content may not be entirely absent, but is apt to be vague. However, few of them are fully conscious of the precise correlation existing between the characteristics as seen in the above illustration—the kind of relationship which is absolutely necessary to their understanding the dimension of notation in its totality.

Clearly what needs to be done is to approach the learning process in music by way of a developmental curriculum which introduces the child, not only to notation or any other single element, but to the total range of musical concepts on a level that is simple enough for the learner to comprehend. This will insure that the multi-faceted aspects of the discipline are fully grasped.

Such an approach can be exemplified in the proposed curriculum by comparing, for example, the suggested experiences of the two extreme levels of Appendix I as they relate to the attempt to communicate to the student, the awareness of sound and silence—the essence of music—in his environment. Whereas a child in kindergarten may be introduced to the different sounds in his environment through such activities as listening to birds sing, car horns beep and sirens scream, the child
in the sixth grade, having a more mature sense of comprehension, and having already been exposed to a wide variety of musical experiences, in previous lessons, can be expected to identify the origins of the sounds that are produced by the diverse instruments which comprise a symphony orchestra as opposed to those sounds emanating from electronic or computerized devices.

In addition to communicating the kindergarten student the awareness of "sound and silence" as outlined above, it is possible, by means of the same examples, to introduce a variety of musical concepts. Pitch and timbre for example, can be indicated by having the children contrast the sounds produced by different birds (crow vs hummingbird) whilst simultaneity and texture can be exemplified by the fact that several birds sometimes sing simultaneously.

In the primary grades, another principal objective of music education is to develop aesthetic sensitivity to music by creating musical literacy--the ability to comprehend the language of music. Such a language, composed of musical symbols and specialized expressions, will convey meaning to the child only if the materials presented have formed part of his concrete experiences. Outlined below are suggested methods of introducing those linguistic elements from which can be built the imagery and concepts needed to understand musical communication.

A child exposed to varied musical sounds will gradually realize that musical pitch exists everywhere: in a glass of water that is struck with a spoon, in a soda bottle converted into a flute, in his or her own voice, and in musical instruments. Such exposure will also bring about recognition of the fact that few sounds are the same. The voice of a child differs from that of an adult; the sounding of a stringed instrument is distinct from that of a brass; musical sounds are characterized in that they may be high-low, loud-soft, or fast-slow. As shown in the first levels of Appendix II, it becomes evident that through the use of simple language, the child can acquire the necessary concepts which will serve as a basis for the development of musical literacy.

It is this kind of dovetailing of the two appendices that is intended in the pedagogic approach to the execution of the curriculum. When it is effected in this manner, the results will insure the development in the student of an awareness of music that transcends a mere factual and fragmented accumulation of specific data.

The student will, in effect, have come to appreciate music as a communication process and as a lifestyle of man and not as a learned task or chore.

FOOTNOTES

1. These curricula will be dealt with in greater detail in a subsequent section of this paper.


4. Ibid., pp. 205-206.

5. Ibid., pp. 208-209.


12 Ibid., p. 60.


14 Ibid., p. 61.


16 Ibid., p. 17.


22 Biasini, Thomas and Pogonowski, op. cit., p. 13.

23 Ibid., p. 15.

24 Ibid., p. 18.

25 Ibid., p. 21.

26 Ibid., p. 23.

27 Ibid., p. 9.

28 Ibid.

29 Ibid.

30 Ibid.

31 Ibid., p. 10.


33 Ibid., p. 21.


36 Bjornar Bergethon and Eunice Boardman, *Musical Growth in the Elementary School* (New York: Holt, Rinehart and Winston, Inc., 1970). The author wishes to cite this source as being one of the most widely used methods books which is designed for the purpose of approaching music from a totality, Gestalt point of view.


BIBLIOGRAPHY

Books


Periodicals


Education - Comprehensive Musicianship.


Dissertations


APPENDIX

<table>
<thead>
<tr>
<th>Experiences Through:</th>
<th>Kindergarten</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music</td>
<td>Match pitch within limited range.</td>
</tr>
<tr>
<td>Singing</td>
<td>Sing melodies based on familiar topics: family, play, pets, school.</td>
</tr>
<tr>
<td>Playing</td>
<td>Sing alone. Sing in groups.</td>
</tr>
<tr>
<td>Rhythmic</td>
<td>Emphasize materials using (sol-mi) interval.</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>Imitate familiar sounds: birds, sirens, whistles. Play simple accompaniments on rhythmic devices.</td>
</tr>
<tr>
<td>Creativity</td>
<td>Express melody and rhythm through free body movement.</td>
</tr>
<tr>
<td>Composition (Notation)</td>
<td>Adapt - walk, run, jump, slide, march to music.</td>
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<tr>
<td></td>
<td>Take part in singing games.</td>
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<tr>
<td></td>
<td>Improvise movement for songs, recordings, and accompaniments.</td>
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<tr>
<td></td>
<td>Re-live musical experiences in the form of dramatic play. Experiment with different sounds. Interpret melodies in drawings and colorings.</td>
</tr>
<tr>
<td></td>
<td>Create rhythmic patterns. Create tunes on bells. Imitate sounds.</td>
</tr>
<tr>
<td>Listening</td>
<td>Illustrate by body movement, line drawings, hand, the direction of a melodic line. Show levels up, down, same.</td>
</tr>
<tr>
<td></td>
<td>Scale - ladder (line-space)</td>
</tr>
<tr>
<td></td>
<td>Distinguish between different sounds in the environment. - Identify simple instruments, bells, sticks, drums, violin, trumpet.</td>
</tr>
<tr>
<td></td>
<td>Listen to recordings of various types. Recognize various sound sources - voices, instruments, electronic sounds.</td>
</tr>
<tr>
<td>Experiences Through:</td>
<td>Grade I</td>
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<tr>
<td><strong>Performance</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Singing</strong></td>
<td>Match pitch (range C-D')</td>
</tr>
<tr>
<td></td>
<td>Sing alone and in groups.</td>
</tr>
<tr>
<td><strong>Playing</strong></td>
<td>Add to tone patterns - (sol, mi, la, do). Sing many songs of different types. Play simple tone patterns on bells. Play simple rhythmic patterns on rhythmic instruments.</td>
</tr>
<tr>
<td><strong>Rhythmic Responsiveness</strong></td>
<td>Pantomime action songs.</td>
</tr>
<tr>
<td></td>
<td>Respond to music he (hears, creates, and composes) with bodily movement.</td>
</tr>
<tr>
<td><strong>Creativity</strong></td>
<td>Develop ostinato patterns.</td>
</tr>
<tr>
<td></td>
<td>Echo clapping - Move to show basic contrasts - (high &amp; low) (fast &amp; slow) (long &amp; short) (loud &amp; soft) (even &amp; uneven). Respond to rhythm by - combinations of -</td>
</tr>
<tr>
<td><strong>Composition (Notation)</strong></td>
<td>Dramatization of songs.</td>
</tr>
<tr>
<td></td>
<td>Associate notation and melodic contour lines with melodic direction. Show direction with hand signs or levels. - Introduce 2-3 line staff. - Introduce simple notation ( ) - Relationship of line - space step space - space skip line - line skip</td>
</tr>
<tr>
<td><strong>Listening</strong></td>
<td>Recognize direction of melodic movement by ear - up, down, same.</td>
</tr>
<tr>
<td></td>
<td>Listen to various recordings which illustrate music of other ethnic groups as well as European. Identify sounds of: piano, violin, trumpet, guitar, tape recorder.</td>
</tr>
<tr>
<td>Experiences Through:</td>
<td>Grade III</td>
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<tr>
<td><strong>Performance</strong></td>
<td><strong>Singing</strong></td>
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<tr>
<td></td>
<td><strong>Playing</strong></td>
</tr>
<tr>
<td>Encourage solo singing/group singing. Extend repertoire, using works exemplifying various topics. Sing rounds, canons. Use major, minor, pentatonic modes. Develop use of rhythmic instrument patterns as means for accompaniments.</td>
<td></td>
</tr>
<tr>
<td>Develop feeling for phrase structure, cadences. Perform music in sets of 2, 3, 4, 6. Clap and sing a syncopated rhythm. Conduct music. Develop more complex ostinatos. Respond rhythmically to music of other countries.</td>
<td></td>
</tr>
<tr>
<td>Develop techniques needed in dramatization. Compose songs and dances. Design movements to illustrate strong beat, pulse, melodic rhythm. Create orchestrations with rhythmic instruments and sound effects. Pantomime (to recordings).</td>
<td></td>
</tr>
<tr>
<td>Become familiar with keyboard. Show melodic direction with hand signs, notation, voice. Compose original melodies. Relate pitch name to scale ladder. Relate scale ladder to bells, piano, xylophone.</td>
<td></td>
</tr>
<tr>
<td>Children should be aware of music of different styles and types. Introduce recordings of cello, viola, bass, etc. Correlate listening to art, poetry. Recognize music in 2's, 3's, or 4 beats (by ear). Identify tone of various instruments.</td>
<td></td>
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<tr>
<td><strong>Composition (Notation)</strong></td>
<td></td>
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<tr>
<td><strong>Listening</strong></td>
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<table>
<thead>
<tr>
<th>Experiences Through:</th>
<th>Grade IV</th>
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<tbody>
<tr>
<td><strong>Performance</strong></td>
<td><strong>Singing</strong></td>
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<tr>
<td></td>
<td><strong>Playing</strong></td>
</tr>
<tr>
<td>Encourage group and solo singing, vary dynamic and tone quality of voice to suit mood of song. Further singing and playing of rounds, canon, discant. Begin two-part harmony. Use autoharp, recorder, piano, tape recorder, bells.</td>
<td></td>
</tr>
<tr>
<td>Move rhythmically in games and dances. Introduce polyrhythms. Include ostinatos which make use of polyrhythms. Use syncopated rhythms in rhythmic echo. Incorporate (calypso music, Latin American, Black spiritual, Hard Rock, Jazz, Blues) rhythms.</td>
<td></td>
</tr>
<tr>
<td>Create additional stanzas to songs. Create original chants and songs. Create accompaniments, second parts to songs. Pantomine to music of various styles and periods. Dramatize small musical playlets.</td>
<td></td>
</tr>
<tr>
<td>Listen to different styles and types of music—march, dance, lullaby, spiritual, descriptive music, chart. Recognize melodic movement by ear. Recognize movement as being in 2, 3, L. Identify: sound from piano, violin, trumpet, clarinet, guitar (all symphonic instruments)</td>
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<tr>
<td>Experiences Through:</td>
<td>Grade V</td>
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<tr>
<td><strong>Performing</strong></td>
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<tr>
<td><strong>Singing</strong></td>
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<tr>
<td><strong>Playing</strong></td>
<td></td>
</tr>
<tr>
<td>Develop tone quality in singing.</td>
<td></td>
</tr>
<tr>
<td>Improve diction. Sing two and three parts by ear and by notation. Include representative works from all major styles. Continue development of technique in playing specialized instruments. Use wide variety of sources and devices to accompany songs.</td>
<td></td>
</tr>
<tr>
<td>(Move to the various rhythms previously cited--Perform songs which use them). Create accompaniments for songs using them. Move expressively and rhythmically to express moods of song. More advanced ostinatos.</td>
<td></td>
</tr>
<tr>
<td><strong>Rhythmic Responsiveness</strong></td>
<td></td>
</tr>
<tr>
<td>Create additional stanzas to songs. Create rhythmic compositions. Use tape recorders, synthesizers to enhance production of original compositions. Create modern dance music and movements.</td>
<td></td>
</tr>
<tr>
<td>Interpret single and compound time signatures. Identify repetition, contrast in tonal patterns, rhythmic patterns, and phrases from the notation. Recognize modulations. Find meaning in a simple score.</td>
<td></td>
</tr>
<tr>
<td><strong>Composition (Notation)</strong></td>
<td></td>
</tr>
<tr>
<td>Listen to (absolute, program) types of music--&quot;Concert music.&quot; Differentiate between major and minor modes. Recognize key tone by ear. Recognize &quot;sections&quot; of work (ABACA) etc. Distinguish instruments of orchestra by sound.</td>
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<tr>
<th>Experiences Through:</th>
<th>Grade VI</th>
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<tbody>
<tr>
<td><strong>Performing</strong></td>
<td></td>
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<tr>
<td><strong>Singing</strong></td>
<td></td>
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<tr>
<td><strong>Playing</strong></td>
<td></td>
</tr>
<tr>
<td>Sing accurately with expression--vary dynamic and tone of voice (alone and in groups). Sing two and three part songs by ear and notation. Play specialized instruments. Explore use of computers, recorders, synthesizers, etc. for accompaniments.</td>
<td></td>
</tr>
<tr>
<td><strong>Rhythmic Responsiveness</strong></td>
<td></td>
</tr>
<tr>
<td>Develop understanding of today's notation (20th C). Respond in groups as well as solo to various pieces of literature which stress varied rhythmic devices in their construction.</td>
<td></td>
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<tr>
<td><strong>Creativity</strong></td>
<td></td>
</tr>
<tr>
<td>Create theme and variations. Dances of different ethnic groups. Should be explored and imitated. Pantomime to pieces of electronic, atonal, and tonal music. Combine these creative movements to form large creative productions.</td>
<td></td>
</tr>
<tr>
<td><strong>Composition (Notation)</strong></td>
<td></td>
</tr>
<tr>
<td>Develop tonal memory. Sing songs from memory on syllable numbers, pitch names. Read parts independently, and in small ensembles. Interpret simple scores of music.</td>
<td></td>
</tr>
<tr>
<td><strong>Listening</strong></td>
<td></td>
</tr>
<tr>
<td>Familiar with variety of well known composers and the style in which they wrote. Identify symphonic works, jazz, etc. Recognize overall form of a piece, compare similarities and differences existing between works designated.</td>
<td></td>
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</tbody>
</table>
APPENDIX II

Experiences Through: Kindergarten

Rhythm-Duration
Bodily response to pulse, short and long sounds, rests; fast-slow (speed). Create rhythmic patterns using body. Chant in rhythm.

Pitch Organization
Recognize: Indefinite sounds, definite sounds, organized sound.
Difference in high and low up-down-same (direction). Notes on lines represent direction. Notes in spaces represent direction.

Dynamics
Develop awareness of: loud sounds, softer sounds; vocabulary of dimension appropriate to level of ability to understand.

Form
Music has a beginning and an end. Songs have words. Instrumental pieces do not have words. Some parts of music may be the same, others are different.

Timbre
Recognition of difference between varying sounds in environment.
Each person has a different quality to his singing voice. Solo vs. group singing produces a different tone color. Instruments differ in sound.

Texture
The more instruments, the bigger or thicker the sound. Some music is played or sung with one instrument. Music that is sung or played does not always have an accompaniment.

Simultaneity
Two or more sounds can occur at the same time.

Experiences Through: Grade I

Rhythm-Duration
Pulse-beat; durational sounds and silences; fast-slow (tempo).
Writing simple rhythms. Musical movements can be organized into beats. Beats can be organized into groups.

Pitch Organization
Introduction of intervals. Sounds can proceed upward or downward to form a pattern (scale). Relationship of melody to a tonal center; skip-step-use of 3 line staff.

Dynamics
Develop aural awareness leading to loud sounds, soft sounds; soft sounds becoming louder, loud sounds becoming softer.

Form
Music can be organized into sentences/phrases. They can be repeated. Words help to cite phrases. Phrases can be the same or different.

Timbre
We blow some instruments, strike some, bow some and pluck others; the blend of group as opposed to individual solo. Instruments differ in sound. (Size has something to do with it.)

Texture
Awareness of thickness, transparency, combination, imitation (one musical line going on at the same time as another).

Simultaneity
Harmony is (organized sounds which are happening simultaneously; two part rounds, songs). Simple intervallic dictation.
<table>
<thead>
<tr>
<th>Experiences Through:</th>
<th>Grade II</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rhythm - Duration</strong></td>
<td>Awareness of 2:1 relationship with pulse ( \frac{J}{J} ); Existence of 2 pulse and 4 pulse durations. Tempo-fastness-slowness. Beats can be organized into sets of 2's - 3's - 4's etc. Walking vs. running.</td>
</tr>
<tr>
<td><strong>Pitch</strong></td>
<td>Pitch is highness or lowness of sound. Organize pitch step-wise or by skips - repeated notes; whole tone groupings. Melodies move up, down, stay the same. Use or 4 lines to represent direction.</td>
</tr>
<tr>
<td><strong>Dynamics</strong></td>
<td>Shaping with dynamics. Attack, release, accent.</td>
</tr>
<tr>
<td><strong>Form</strong></td>
<td>Musical phrases can combine to form large structures. Repetition and contrast give a piece form. ABA, ABACA etc. Motive, imitation.</td>
</tr>
<tr>
<td><strong>Timbre</strong></td>
<td>Awareness of: individual timbre, combination of timbre. Some tone colors are produced by blowing, bowing, strumming, striking, plucking, shaking, scarping, electrically.</td>
</tr>
<tr>
<td><strong>Texture</strong></td>
<td>Awareness of thickness, transparency, combination, contrapuntal, homophonic.</td>
</tr>
<tr>
<td><strong>Simultaneity</strong></td>
<td>Additional intervals Polymeters Chord</td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th>Experiences Through:</th>
<th>Grade III</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pitch</strong></td>
<td>Recognize imitation (rounds, canon); Intervals (spacing) change of key.</td>
</tr>
<tr>
<td><strong>Organization</strong></td>
<td>Discriminate melodic movement in pieces with conventional and unconventional pitch organizations.</td>
</tr>
<tr>
<td><strong>Dynamics</strong></td>
<td>Introduce terminology and review of loud-forte, soft, piano, Crescendo ( \uparrow ) Decrescendo ( \downarrow ), staccato, tenuto.</td>
</tr>
<tr>
<td><strong>Form</strong></td>
<td>Develop aural and visual awareness of phrases, retrograde, cadence, musical signs--repeat, D.C. al fine. Repetition and contrast give unity and variety.</td>
</tr>
<tr>
<td><strong>Timbre</strong></td>
<td>Identify tone of instruments vs. women's voices vs. men's voices. Vibrato. Large instrument vs. small instrument.</td>
</tr>
<tr>
<td><strong>Texture</strong></td>
<td>Aural and visual awareness of transparency, combination, contrapuntal, homophonic, polyphonic. Identify chord changes</td>
</tr>
<tr>
<td><strong>Simultaneity</strong></td>
<td>Tonic chord V-I relationship</td>
</tr>
<tr>
<td>Experiences Through:</td>
<td>Grade IV</td>
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</tr>
<tr>
<td>Pitch Organization</td>
<td>Recognize key center in various keys - CM-PM-GM-DM. Chord patterns, triads and inversions transposition - minor mode.</td>
</tr>
<tr>
<td>Dynamics</td>
<td>Awareness of various combinations of dynamics. Sforzando. Review other terminology related to dynamics. Reinforce recognition of phrase length; alternatives of tonal and rhythmic patterns. Sections of larger compositions which are alike. Rondo.</td>
</tr>
<tr>
<td>Form</td>
<td>Compare women's voices, men's voices, children's voices tonal instruments vs. atonal. Orchestral instruments.</td>
</tr>
<tr>
<td>Timbre</td>
<td>Aural and visual awareness of transparency, combination, contrapuntal, homophonic, polyphonic.</td>
</tr>
<tr>
<td>Texture</td>
<td>Intervallic structure of triads. Dominant seventh chord. Transposition Minor mode.</td>
</tr>
</tbody>
</table>

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<tr>
<th>Experiences Through:</th>
<th>Grade V</th>
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</thead>
<tbody>
<tr>
<td>Rhythm-Duration</td>
<td>Promote and reinforce increased understanding of rhythm of melody. Pulse, metric grouping, accents (off beat), two uneven notes per pulse. Pulse groupings in 6 beat measures. Polyrhythms.</td>
</tr>
<tr>
<td>Form</td>
<td>Promote understanding of theme and variation. Review previous forms. View smaller forms in larger forms.</td>
</tr>
<tr>
<td>Timbre</td>
<td>Recognition of fingered tremelo; Use of sticks and beaters. Pizz., Bowed.</td>
</tr>
<tr>
<td>Texture</td>
<td>Aural and visual awareness of transparency, combination, contrapuntal, homophonic, polyphonic.</td>
</tr>
<tr>
<td>Simultaneity</td>
<td>Promote increased understanding of previous cycles, IV chords, har- monic sequences, analysis New-chord tones. Instruments of orchestra in combination.</td>
</tr>
</tbody>
</table>
Experiences
Through:

Grade VI

Rhythm-
Duration
Reinforce: diminution, syncopation, augmentation; dotted rhythms; rhythm of melody; accent; tied notes; meters, signatures; identify polyrhythms.

Pitch
Organization
Key signatures - scalewise patterns - tone clusters - non-chord tones - scale relations - harmonic minor.

Dynamics
Reiterate relation of dynamics with melody, form, timbre, texture.

Form
Recognition of sonata from symphonic forms, operatic forms, compound forms, etc.

Timbre
Awareness: reinforce pizzicato sounds of orchestral families.

Texture
Reinforce aural and visual awareness of transparency, combination, contrapuntal, homophonic, polyphonic.

Simultaneity
Tonic chord intervals, pentatonic groupings, V7 chord, triads and IV chord inversions. Play on autoharp.

THE ESTHETIC THEORIES OF JOHN DEWEY AND THEIR EFFECT ON MUSIC EDUCATION PRACTICES OF TODAY

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INTRODUCTION AND BACKGROUND

In the hectic day-to-day planning of musical activities for the classroom, it is all too easy to do little more than fill up time. Music class can become a very unsystematic succession of activities, such as singing, listening, playing instruments, etc., all without the benefit of unifying long-range goals. This disorganization can and does have a detrimental effect on the entire class; it leaves the students without any underlying structure to depend on, just one surprise after the other. Granted, this is an extreme example of bad classroom administration, but a concern for better organization of music education programs has led to the publication of countless books and articles urging the consideration of long-range goals, behavioral objectives, and curriculum planning. The value of long-range planning is obvious and its merits have been accepted and espoused by the vast majority of dedicated music educators. However, some of these people feel that the problem lies deeper yet.

Sam Reese, an elementary school general music teacher in the Iowa City Community Schools, recently wrote an article which appeared in the February 1976 issue of the Music Educators Journal. In it he states, "At the root of the problem [sic] are a general lack of critical thought by music educators about the problems of aesthetics and a lack of awareness of how aesthetic problems affect educational practice. An understanding of aesthetics--the philosophical inquiry that seeks to answer questions about the nature of music and its value for human life--is needed by every music educator."

In order to develop goals and objectives, Mr. Reese suggests that music educators begin with the articulation of the nature and value of music. "The end goal of instruction should become the standard by which we judge the value
of music. "The end goal of instruction should become the standard by which we judge the value of our specific activities. . . . [and] we cannot possibly judge the value of our objectives and activities if we do not understand the nature of music and the reasons for teaching it."

He believes that aesthetic theory and music education are not unrelated, but exist in a dialectical relationship.

Another who maintains the need for a study of aesthetics is Robert C. Smith. In his dissertation (see footnote 3--passim) he remarks that the music educator must ask himself "What is the importance of music in human experience?" . . . both in the personal life of the individual and in the experience of society as a whole. The way a music educator answers this question will determine how he approaches the teaching of music. For the sake of illustration, Dr. Smith contrasts two aesthetic viewpoints with their subsequent effect on the attitude of the music teacher. "If one's choice of music and musical activity has little or no effect on the lives of others, the music educator has only a dubious reason for trying directly to alter pupils' attitudes; if one's choice of music and musical activity is intimately connected with the quality of human experience in the community or the entire society, the music educator has a compelling reason for trying directly to alter pupils' attitudes."

What one considers to be the nature of music and its value for humanity--or in other words, one's ideas on aesthetics--have an effect on the way that person teaches his subject.

Dr. Smith also recognizes the need for a knowledge of aesthetic theory in the development of goals and objectives, though he believes it is not so easy to logically derive a rationale for music education from aesthetic theory. Rather than beginning with abstract theories and trying to formulate from these practical goals for the music program, he advocates the opposite procedure--that is, starting with an examination of current practices in music education and appraising them in light of a knowledge of aesthetics. This is perhaps a better way to approach the field of aesthetics as it relates to music education, for there is great danger of misunderstanding when one tries to make a concrete interpretation of very general abstract theories. "Philosophical subjects are not established sciences; they are full of disputed matters, open questions, and bottomless speculations."

(John Dewey's philosophic writings have suffered miserably under the well-meaning but misguided efforts of other writers who have misunderstood his ideas too literally.)

The problem of interpreting aesthetic theory into concrete objectives for the music classroom is illustrated in a case set forth by Dr. Smith. "If music has instrumental value, there are impressive reasons for having everyone study music. However, it is one thing for the aesthetic theorist to claim that the quality of an entire society is manifest in the quality of its music; it is quite another for a music educator to claim that the quality of an entire society can be improved if pupils in the public schools study music. The music educator must further claim that he has within his power to guide the study of music in such a manner that the quality of pupils' lives is higher than it otherwise would be." Such a questionable statement should demonstrate the fallacy in making a direct application of aesthetic theory to a rationale for music education. As Dr. Smith remarks, educators must realize that "esthetic theory cannot provide a statement of the rationale of music education, but music educators can never state the rationale of music education without the help of aesthetic theory."

The foregoing discussion was not intended to discourage the reader from any further consideration of aesthetics; it merely included to emphasize the necessity for great care when applying aesthetics to concrete music education practice. Music educators can be misled into making statements that cannot be tested. The fact is that most music educators already have beliefs about the value of music, beliefs which govern the methods that they use. So "the problem is not to find a source of beliefs, but to find some help in testing the validity of beliefs. Music educators must try seriously to determine what beliefs govern current practices and their estimates of the worth of current practices."

The conclusion of the preceding arguments is that a study of aesthetics is necessary for the forest."
clarification of goals and objectives, and that it is also an aid in formulating a rationale for music education. A complete study of aesthetics and of current practices in the field of music education would necessarily occupy many fat volumes. Space and time are at a premium here, and thus an exploration of a topic of such wide scope will have to be limited. In this paper I have chosen to concentrate on the aesthetics of John Dewey as explained in his book *Art as Experience*. A relationship will be explored between his esthetic theories and the goals and objectives of the Contemporary Music Project, a method which has referred to Dewey's aesthetics and educational philosophy in the articulation of its goals.

The field of aesthetics deals with such abstract material in such a subjective manner that it would seem a difficult task for one to analyze this field of study, or especially to categorize the many viewpoints under a few general headings. Stephen C. Pepper has done just this in his book *World Hypotheses*. He cites four ways of looking at the world or "world hypotheses"; all writings on aesthetics fall into one of these categories which include: 1) mechanism, 2) organicism, 3) contextualism, and 4) formalism. Pepper has chosen one major book to illustrate the fundamental postulates of each category. Contextualism, with which this paper will be concerned, is represented by John Dewey's *Art as Experience*.

DEWEY'S AESTHETIC THEORIES

"[Esthetic] theory," says John Dewey, "is concerned with discovering the nature of the production of works of art and of their enjoyment in perception. How is it that the everyday making of things grows into that form of making which is genuinely artistic? How is it that our everyday enjoyment of scenes and situations develops into the peculiar satisfaction that attends the experience which is emphatically esthetic? These are the questions theory must answer." Dewey continues by stating that the search for the answers to these questions must begin with life experience, the day-to-day interaction of man and his environment. "In order to understand the aesthetic in its ultimate and approved forms, one must begin with it in the raw; in the events and scenes that hold the attentive eye and ear of man, arousing his interest and affording him enjoyment as he looks and listens."

In an attempt to formulate a theory of esthetics that grows out of everyday experience, one must first examine the daily life of human beings, so-called "normal" experience. Dewey remarks that the nature of experience is determined by the essential conditions of life. Though man is on the highest rung of the evolutionary ladder, his roots are back "in a long line of animal ancestry." "He [man] shares basic vital functions with them [animals] and has to make the same basal adjustments if he is to continue the process of living." The living being is intimately bound up with his surrounding environment. He cannot exist without it. Yet the environment (both physical and social) is constantly changing so that the living organism is called upon to make continual adjustments in order to survive. "Life goes on in an environment; not merely in it but because of it, through interaction with it."

At this point this writer would like to quote Dewey at length in a continued discussion of the aesthetic as it grows out of experience.

Life itself consists of phases in which the organism falls out of step with the march of surrounding things and then recovers unison with it—either through effort or by happy chance. And, in a growing life, the recovery is never mere return to a prior state, for it is enriched by the state of disparity and resistance through which it has successfully passed. If the gap between organism and environment is too wide, the creature dies. If its activity is not enhanced by the temporary alienation, it merely subsists. Life grows when a temporary falling out is a transition to a more extensive balance of the energies of the organism with those of the conditions under which it lives.

These biological commonplaces are something more than that; they reach to the roots of the aesthetic in
experience. The world is full of things that are indifferent and even hostile to life; the very processes by which life is maintained tend to throw it out of gear with its surroundings. Nevertheless, if life continues and if in continuing it expands, there is an overcoming of factors of opposition and conflict; there is a transformation of them into differentiated aspects of a higher powered and more significant life. The marvel of organic, of vital, adaptation through expansion (instead of by contraction and passive accommodation) actually takes place. Here in germ are balance and harmony attained through rhythm. Equilibrium comes about not mechanically and inertly but out of, and because of, tension.

There is in nature, even below the level of life, something more than mere flux and change. Form is arrived at whenever a stable, even though moving, equilibrium is reached. Changes interlock and sustain one another. Wherever there is this coherence there is endurance. Order is not imposed from without but is made out of the relations of harmonious interactions that energies bear to one another. Because it is active (not anything static because foreign to what goes on) order itself develops. It comes to include within its balanced movement a greater variety of changes.¹²

In addition Dewey states that order cannot help but be admirable in a world which is constantly threatened with disorder. "For only when an organism shares in the ordered relations of its environment does it secure the stability essential to living. And when the participation comes after a phase of disruption and conflict, it bears within itself the germs of a consummation akin to the esthetic."¹³

The rhythm of loss of integration with environment and recovery of union not only persists in man but becomes conscious with him; its conditions are material out of which he forms purposes. Emotion is the conscious sign of a break, actual or impending. The discord is the occasion that induces reflection. Desire for restoration of the union converts mere emotion into interest in objects as conditions of realization of harmony. With the realization, material of reflection is incorporated into objects as their meaning. Since the artist cares in a peculiar way for the phase of experience in which union is achieved, he does not shun moments of resistance and tension. He does not cultivate them, not for their own sake but because of their potentialities, bringing to living consciousness an experience that is unified and total.¹⁴

The preceding description of the experience of a living being interacting with its environment should be familiar to all. Each reader can look back at the events of his life and think "yes, that's true." He may not be as aware, however, of the elements of his experience as they reveal themselves in rhythms, in harmony and dissonance, in balance and counterbalance. The terms that Dewey has used to describe experience in general are terms that are used by all lovers of fine art, including musicians, in talking about the arts. The elements of experience-rhythm, harmony, conflict, order, form--are also elements of products of art, whether they be buildings, paintings, music, or literature. Art in a way can be described as intensified experience. Dewey remarks that "the work of art has a unique quality . . . of clarifying and concentrating meanings contained in scattered and weakened ways in the material of other experiences."¹⁵

Dewey is well aware that not all human experience deserves the term "aesthetic." In fact, he envisions two types of world, or experience, in which there could be no aesthetic. That would be a world undergoing constant change, or a static world in which there would be no change, just humdrum routine. These are the extremes; however, much of one's life experiences fall, unfortunately, into one or the other of these categories. Says Dewey, "There exists so much of one and the other of these two kinds of
experience that unconsciously they come to be
taken as norms of all experience. In comparison,
an esthetic experience is an experience—the
material experienced runs its course to fulfill-
ment. 
Such an experience is a whole and car-
ries with it its own individualizing quality and
self-sufficiency. It is an experience. Dewey
compares the unfolding of an esthetic experience
metaphorically to the experience of a rock as it
rolls down a hill. "The stone starts from some-
where, and moves, as consistently as conditions
allow, toward a place and state where it will
rest. Toward an end. The final
coming to rest is related to all that went before
as the culmination of a continuous movement." 1

In every esthetic experience there is an
element of undergoing or suffering. If this
were not so there would be no taking in of what
preceded. "Taking in" in any vital experience
is something more than placing something on the
back of consciousness over what was previously
known. It involves reconstruction which may be
painful. 15 Of necessity then, esthetic experi-
ence is emotional. Emotions are attached to
events and objects as they unfold or make them-
se known to man through the passage of time.
Emotions do not exist by themselves; they are
always "parts of an inclusive and enduring situ-
ation that involves concern for objects and their
issues." 19 "Emotion is the moving and cementing
force [in an experience]. It selects what is
congruous and dyes what selected with its color,
thereby giving qualitative unity to material ex-
ternally disparate and dissimilar. It thus pro-
vides unity in and through the varied parts of
an experience." 20 Such a unity in an experience
gives the experience an esthetic character.

Dewey makes note of the fact that in our
society the act of producing a work of art and
the act of perception or enjoyment are regarded
as two separate entities unrelated to one an-
other. There are the artists who actively engage
in the production angle, and there are the con-
sumers who "appreciate" the works of art. "Some-
times," he says, "the effect is to separate the
two from each other, to regard art as something
superimposed upon esthetic material, or, upon
the other side, to an assumption that, since art
is a process of creation, perception and

enjoyment of it have nothing in common with the
creative act." 21 Nothing could be less true
according to Dewey. In fact, artistic produc-
tion and esthetic appreciation sustain each
other. The value of an object of art cannot be
measured in terms of execution alone; it always
implies the esthetic perception of those who
enjoy the art object. To be truly artistic, a
work must also be esthetic—that is, framed for
enjoyed receptive perception. Artistic produc-
tion is intimately related to esthetic perception.
The acts of doing and undergoing have the
same relationship to each other as do the acts of
doing and undergoing in the experience of man in
his environment. Man, the living organism, is
intimately bound to his environment, as has been
stated earlier. Man acts upon the environment
and in turn is acted upon by the environment.
There is constant interaction. Likewise, inter-
action exists in the relationship between the
production of art and the esthetic appreciation
of it. All of this illustrates that "the esthe-
tic is no intruder in experience from without
... but that it is the clarified and intensi-
ified development of traits that belong to every
normally complete experience." 22

That the artist as creator must constantly
evaluate the progress of his work and must fully
exercise his own aesthetic judgment is probably
reasonable and understandable. However, the re-
lationship of doing and undergoing is more diffi-
cult to discern when considering the consumer,
the esthetic perceiver. Dewey maintains, "There
must be indirect and collateral channels of
response prepared in advance in the case of one
who really sees the picture or hears the music.
The first of these channels is motor preparation,
a large part of esthetic education in any par-
ticular line. To know what to look for and how
to see it is an affair of readiness on the part of
motor equipment." 23 "The other factor that
is required in order that a work may be expres-
sive to a peripient is meanings and values ex-
tracted from prior experiences and funded in
such a way that they fuse with the qualities
directly presented in the work of art." 24
(These two factors—motor preparation and values
derived from past experience—will carry great
import later in the discussion of music educa-
tion.) One must remember that "receptivity is
not passivity." It . . . is a process consist-
ing of a series of responsive acts that accu-
ulate toward objective fulfillment."
If this
receptivity is not allowed to develop to fulfill-
ment for lack of one or both of the previously
mentioned factors, the result is not perception
but mere recognition, and recognition is nothing
more than identification, the labeling of some-
thing, even an art object, into an existing
stereotype. Musicians involve themselves in
this type of activity whenever they classify a
piece of music as "Romantic" or "Baroque" or
"acid rock." Recognition in this sense is not
bad, but one must realize that recognition is
not esthetic perception. The uninitiated lis-
tener also exercises an act of recognition when
he pejoratively terms all classical music as
"long-hair." The act of recognition stops at
this point and never develops into full esthetic
perception. When Marshall McLuhan pronounces
that "the media is the message," this is a form
of recognition. For he is attaching a label to a
type of media, and he never gets beneath the
surface; his perception is never carried to
esthetic fulfillment. There is no emotion and
therefore, no esthetic in an act of recogni-
tion."
In Art as Experience Dewey spends several
chapters discussing the common and varied sub-
stances of the arts. This writer would like to
present some ideas regarding this subject.
First, a discussion of those elements common to
all of the arts.
In answer to the rhetorical question "What
subject matter is appropriate for a work of art?"
Dewey says, "The interest of an artist is the
only limitation placed upon use of material, and
this limitation is not restrictive." The
first and foremost element found in all the arts
is the mood. Both the artist in his creation
and the perceiver in his re-creation begin with
a "total seizure," a pervasive quality felt in
all parts of the work. The reader should recall
that Dewey believes emotion is the cementing
force that holds all parts of a work of art
together and makes it an esthetic whole. "That's
whole is felt as an expansion of ourselves." In
addition to the total pervasive quality,
"every work of art has a particular medium, by
which the qualitative pervasive whole is
carried." Whether the medium be painting,
music, architecture, literature, the existence
of a medium is common to all. The medium itself
is a mediator; it acts as a go-between of artist
and perceiver. It is a medium of communication;
the medium unites the artist and perceiver in an
esthetic experience. Finally, every art takes
place in space and time, or "space-time" as Dewey
terms it. "While the emphasis of the plastic
arts is upon the spatial aspects of change and
that of music and the literary arts upon the
temporal, the difference is only one of emphasis
within a common substance. Each possesses what
the other actively exploits, and its possession
is a background without which the properties
brought to the front by emphasis would explode
into the void, evaporate into imperceptible
homogeneity." Of course, while the arts hold certain
qualities in common, they are still of varied
substance. Dewey states that the variety of
media available to the arts is inexhaustible.
There are the more recognizable arts of painting,
sculpture, architecture, music, dance, drama,
literature; the newer art of film-making, and the
old forgotten useful arts such as pottery, weav-
ing, silversmithing, needlework, etc. "Different
media have different potencies and are adapted
to different ends." It is equally foolish to
to regard the arts as totally unrelated one to the
other, as it is to consider them all run together
into one art.

DEWEY ON MUSIC

Music is the main consideration of this
paper, and Dewey has some ideas on the unique
qualities of music. In contrast to the sculp-
tural which expresses the enduring, the stable,
and the universal, music having sound as its
medium "expresses in a concentrated way the
shocks and instabilities, the conflicts and
resolutions, that are the dramatic changes en-
acted upon the more enduring background of nature.
and human life."32 Music expresses best stir, agitation, and movement. Sound is the conveyor of what impends, just as in nature the animal hears impending danger long before he sees it. "Sound agitates directly" in comparison with the indirect effect of what is seen. "Because of this immediacy of effect, music has been classed as both the lowest and the highest of the arts."33

It is the peculiarity of music, and indeed its glory, that it can take the quality of sense that is most immediately and intensely practical of all the bodily organs (since it incites most strongly to impulsive action) and by use of formal relationships transform the material into the art that is most remote from practical preoccupations. It retains the primitive power of sound to denote the clash of attacking and resisting forces and all accompanying phases of emotional movement. But by the use of harmony and melody of tone, it introduces incredibly varied complexities of question, uncertainty and suspense wherein every tone is ordered in reference to others so that each is a summation of what preceded and a forecast of what is to come.34

Form, rhythm, substance—these have been mentioned earlier as characteristics of an esthetic experience. This writer would like to discuss these in more depth before entering onto the problems of education and today's society. Form is a character belonging to every esthetic experience. It may be defined as "the operation of forces that carry the experience of an event, object, scene, and situation to its own integral fulfillment."35 Form grows out of the substance of events; it depends on the existence of rhythms in nature. The old formula for beauty—unity in variety—must be reviewed in terms of opposing energies and the balance and counterbalance of these opposing energies. The order achieved in the balance of these energies gives the work of art or experience its dynamic unity.

Says Dewey, "Every movement of experience in completing itself recurs to its beginning, since it is a satisfaction of the prompting initial need. But the recurrence is with a difference; it is charged with all the differences the journey cut and away from the beginning has made."36 This statement reminds this writer of some paragraphs once read concerning the sonata-allegro form. The source was Charles Rosen's The Classical Style: Haydn, Mozart, and Beethoven. Mr. Rosen firmly stated that there was no such thing as sonata-allegro form. The form grew out of the material of the piece. It was not a form imposed from without, but a natural outcome of the material with which the composer began. The initial material desired fulfillment and the result of the material running its course was so-called sonata-allegro form. He further stated that the recapitulation (or recurrence in Dewey's words) was not a literal repeat of what had gone on in the exposition, but rather the recapitulation took on renewed meaning in light of the experiences or changes undergone in the development of the material.37

As an additional example, there are the words of Thomas Mann in regard to the writing of his epic novel The Magic Mountain. He says that it was originally intended as a short story, but "a private intuition soon began to steal over me that this subject matter tended to spread itself out and lose itself in shoreless realms of thought."38 The book grew and took its form out of the development of the material. Mann interacted with the subject matter and authored not the short story he intended, but a much longer work. Here is dynamic unity and the growth of form out of the subject matter. As he states, "It is possible for a work to have its own will and purpose the total seizure... The work must bring it forth and compel the task to completion."39

ACCEPTANCE OF DEWEY'S THEORIES

Up till now the substance of this paper has centered on Dewey's esthetic theories; however, there are problems in the acceptance of his theories. Why is it that so many people
disagree with his conception of art as experience? Why are the majority of people "turned-off" by anything that implies the artistic or esthetic? Why is there repulsion on the part of some people in connecting art with general everyday experience? Dewey's answers to these questions will be revealed in the following paragraphs.

In societies where the arts play an active part in the everyday life of the community (in religion, celebration, work and play) they flourish. The arts thrive because they are an integral element of everyday experience. On the other hand, we are living in a society in which art has been isolated from human conditions. Art, like religion, has been put on a pedestal, remote from everyday experience, assigned to the museum and concert hall for the pleasure of the rich and the intellectually elite. This museum conception of art has constructed a great obstacle to a real understanding of works of art and to aesthetic theory. Dewey mentions, "When an art product once attains classic status, it somehow becomes isolated from the human conditions under which it was brought into being and from the human consequences it engenders in actual life-experience." 40

There are a number of historic reasons for this compartmentalized attitude toward art. One is the rise of capitalism. People with money, particularly the nouveau riche, love to surround themselves with objets d'art in order to gain status in the eyes of others. They collect paintings, sculptures, and purchase subscription boxes to symphony halls, This practice helps to perpetuate the idea of art existing for the elite. Another factor separating art from experience, at least in Europe, has been the rise of nationalism. Along with large armies, and elaborate palaces, royalty in each country tried to outdo each other in erecting museums containing collections of envied masterpieces, the plunder of conquests. Thus art became associated with royalty, today an outdated form of government. Industry and international commerce both had an effect on the production and appreciation. Industry, first of all, in mass production of useful articles virtually broke down the need for skilled craftsmen. Artists outside the mainstream of life found it necessary to individualize, to develop the uniqueness of their art, to develop idiosyncrasies to the fullest in order to emphasize the difference between their original work and the industrially mass-produced articles. International commerce and the removal of art products from their indigenous surroundings into a new setting helped once again to sever the ties between the art object and its root in experience. After all of these effects had taken their toll, theories about art were then constructed, theories which raised works of art to a level of unworldly perfection, and thusly the last remaining ties of art with experience were broken.

Why do many persons feel repulsion towards a theory that relates art to everyday experience? The question has almost been answered. Art has been compartmentalized, assigned to its niche in society, placed on its pedestal and the rich and intellectually elite would like to keep it there as a part of their domain. One can ask the alternative question from the viewpoint of the less fortunate masses. Why do the masses find art so "anemic" and why do they resort to cheap thrills for esthetic pleasure? Dewey finds the answer in one of the dualisms he fought against all his life. Life, according to Dewey, is compartmentalized in our society; people are divided into static classes. There are Plato's kind of philosopher-thinkers, and there are the masses who follow the pleasures of the flesh. In such a dualistic society the philosopher thinker elements revile the crudeness of the masses. Sense and the flesh get a bad name. On the other hand, the masses view the philosopher-thinkers as "eggheads" and their art and music appear anemic since it has no apparent relationship to life as they know it at all. Instead these people turn to activities that they don't consider as esthetic experiences—things like movies and jazz and especially today rock music. These art forms are relatively new; their roots in common experience are clearly observable; their sensual pleasure of sight and sound has not been denied them through intellectualizing. Compare these to the
compartmentalized conception that great art belongs in the art museum and the symphony hall. Here one must go to "worship" the great masterpieces.

Dewey, fighting this dualism of mind versus body, intellect versus the senses, spiritual versus profane maintains that the senses, the will and the intellect are all parts of the same process. They cannot and must not be compartmentalized; for such a segregation of these elements of life will lead to a stunted, unfulfilled existence. "The extent to which the process of living in any day or hour is reduced to labeling situations, events, and objects as 'so-and-so' in mere succession marks the cessation of a life that is a conscious experience." 41

To quote Dewey:

The existence of art is the concrete proof of what has just been stated abstractly. It is proof that man uses the materials and energies of nature with intent to expand his own life, and that he does so in accord with the structure of his organism--brain, sense-organs, and muscular system. Art is the living and concrete proof that man is capable of restoring consciously, and thus on the plane of meaning, the union of sense, need, impulse and action characteristic of the live creature. The intervention of consciousness adds regulation, power of selection, and redemption. Thus it varies the arts in ways without end. But its intervention also leads in time to the idea of art as a conscious idea--the greatest intellectual achievement in the history of humanity. 42

Another dichotomy of life which Dewey attributed to the rise of industry was the dualism of work and play. The Industrial Revolution developed two basic social classes: the workers who handled all the heavy physical labor and the executive thinkers who sat back and directed the work of the physical laborers. Prestige went to the executive thinker, and physical labor was downgraded. This separation of classes has been discussed earlier. However, another outgrowth of this separation of the functions of mind and body was a dichotomy of work and play. Industrial work meant an occupation of sheer drudgery for most people. There was no need for using their minds on the job; usually a job consisted of turning the same knob endlessly for the entire day. (Consider Charlie Chaplin in Modern Times.) Laborers were told exactly what tasks to perform by the executive thinker. If one imagines the drudgery and boredom accompanying such work, one can also imagine the desire that came at the end of a day to let loose in some kind of play. Play was anything that had nothing to do with work. Play became something to be enjoyed and work was something distasteful that one put up with so he wouldn't starve. Consider the psychological damage that occurs in time under such conditions. This dualism of work and play makes it difficult for men to have esthetic experiences. Yet they have a great need for esthetic experiences. Substitutes (drinking, escape entertainment, daydreaming, drugs, the search for excitement on any terms) are bad in two respects: 1) they do not satisfy the craving, and 2) they have undesired personal and social consequences. 43

To Dewey work and play are two aspects of the same process. To one who is actively alive and alert, all bodily functions are awake and being utilized as a whole (sense, will, intellect). This writer is reminded of a television program viewed recently which contained a short documentary on the Amish folk of Pennsylvania. Dewey may not have agreed totally with their life-style, but there exist some aspects that he would have admired. For one thing, they have never accepted industrialization, and therefore have never experienced the fracture of work and play. The news commentator mentioned that work and play to the Amish became one in their labor on the land and particularly in the building of a new house, when the entire community joined in the act. It was said that they lived an active life close to nature, in which passive entertainment (such as TV) had no part. This picture suggests a small society in which each person is called upon to use his total resources in his day-to-day
experience. In this way one's daily life would approach the esthetic experience with which Dewey concerns himself.

There are many problems in our culture which have given rise to a separation of art from experience, and the problems lead us to search for solutions. Dewey states that an answer to the problems lies in the recovery of the continuity between esthetic experience and the normal processes of living. We take pride in living in an advanced civilization, and consider ourselves civilized. What does this mean? Dewey remarks that "the verb 'to civilize' is defined as 'to instruct in the arts of life and thus to raise in the scale of civilization.'"[44] "Instruction in the arts of life is something other than conveying information about them. It is a matter of communication and participation in values of life by means of the imagination, and works of art are the most intimate and energetic means of aiding individuals to share in the arts of living. Civilization is uncivil because human beings are divided into non-communicating sects, races, nations, classes and cliques."[45]

Through the ages civilizations have come and gone. The only enduring remains of those civilizations are their art works. Why should we in this modern society concern ourselves with this art from the past and from other cultures than our own? How can we know what these people were trying to express? First of all, Dewey assumed that the constitution of all normal human beings is basically the same. Though it is true that transient aspects of foreign cultures may be different from ours, and that these differences may be apparent in their works of art, Dewey strongly holds that experience is a matter of the interaction of the artistic product with the self. It is not therefore twice alike for different persons even today. It changes with the same person at different times as he brings something different to a work. But there is no reason why, in order to be esthetic, these experiences should be identical."[46] There is another reason for experiencing the art of other cultures and this has to do with the broadening and growth of the human organism. "The art characteristic of a civilization is the means for entering sympathetically into the deepest elements in the experience of remote and foreign civilizations."[48] For us their art can effect a broadening and deepening of our own experience, rendering it less local and provincial as far as we grasp, by their means, the attitudes basic in other forms of experience."[48]

To Dewey all growth is good; esthetic experiences are valued and valuable because they are educational; they make us grow. Dewey has remarked that life is growth, and education is growth. Here is the essence of his philosophy: that life should be a constantly expanding awareness of ourselves and our world. Art can help us to grow in that it can provide the material for esthetic experiences. "A work of art is said to have value insofar as it causes or promises to cause an esthetic experience."[49] Esthetic experiences in turn, because they involve the total organism, can help to affect attitudes, and perhaps consequently changes, in a society constricted by dualisms.

The question then facing a teacher is "What can I do to make my students able to make more sense of the world?" This is the question that must be asked when choosing materials and activities for use in the classroom. "Will the activities in my classroom aid the students in reaching this end goal of making more sense of the world? What can I do to help them have esthetic experiences; what can I do to help them grow?"

A RATIONALE FOR MUSIC EDUCATION

There are difficulties to be encountered in an attempt to derive a rationale for music education from aesthetic theory. Some general observations can, however, be made. A teacher who bases his teaching strategies on the "contextualistic" theories of John Dewey is constantly aware of the educational possibilities in the interaction of students with the environment. An esthetic experience, as described above, is educational not in the limited sense that the child gathers information about a subject, but in the expanded sense that a change involving sense, will, and intellect has taken place. This change, this growth creates in the child a
greater awareness of the world around him. This esthetic experience with its inherent possibilities for growth then is something desirable to strive for in the classroom.

At the same time, the student also needs to acquire certain skills and knowledge, so that equipped with these he can continue to have esthetic experiences in the future outside of the classroom. Robert C. Smith states simply, "The function of the music program in the public schools is to provide a context in which esthetic experiences can be had, and to provide pupils with the knowledge and skills necessary for having esthetic experiences after they leave school." Earlier in the discourse mention was made of two factors necessary in order that a person perceive esthetically a work of art. These are motor preparation and values derived from one's own past experience. Dewey states that for a perceiver to really hear and really experience a piece of music, for instance, he must re-create in terms of his own experience the work of the composer. This re-creation assumes that the perceiver knows something about the way that the composer organized his materials. The re-creation cannot happen if the perceiver has no technical knowledge of the musical materials. In order for the piece of music to have meaning, the perceiver must have had experience himself with the dimensions of music. This is the motor preparation factor; it involves knowledge of melody, rhythm, simultaneity, and use of these in singing, playing instruments, and creating music of his own. Guided practice in performing, listening, and creating provides the student (the perceiver) with the knowledge and skills he will need in order to have future esthetic experiences in music.

The motor preparation factor has long been an established fact in music education programs around the country. Emphasis has changed in recent years with less stress on the performing aspect and greater priority given to the creative end. More will be said on this later, but the point at the moment is that motor preparation has always occupied a significant part of any school music program.

The other factor is more illusive, and until recently has been altogether ignored, perhaps because it did not reed the attention that today's complex, dualistic society mandates. This factor is unique to Dewey's conception of art as experience; it embodies the question "How does art relate to everyday experience?" Using Dewey's own words, this factor is the "meanings and values extracted from prior experiences and funded in such a way that they fuse with the qualities directly presented in the work of art." It follows that the task of the music teacher is to help students relate the qualities of music to qualities of their own experience. This is indeed the most difficult challenge facing the teacher; such a task demands that the teacher not only know his subject matter, but he must also know his students. He must make a study of the community in which the students live; he must be aware of the types of experience to which they are accustomed, so that he can help them relate their everyday experience to the music they hear.

The problems to be surmounted in relating art to the students' everyday experience are multiplied by the problems of the society in which we live. Earlier discussion centered on the dualisms of our society—the dichotomy between classes, work and play, physical labor and executive management, spiritual and profane. The very existence of these dualisms means that so much of our experience is fractured; it doesn't involve our entire being and therefore, so much of our experience is non-esthetic. How can a teacher bridge the gap between everyday experience that is decidedly non-esthetic and the experience of a work of art which is empathically esthetic? The difference between the two is so great that it leads many to believe that esthetic experience is unique, and thus we observe the development of the museum conception of art. In order to break down these dualisms the teacher of music must find a way to relate everyday experience with the experience of a piece of music. Herein lies the art of teaching; of knowing what matters most to the students and finding a way to relate their concerns to musical experiences. "The separation of art from experience in general must be overcome if the music program is to have any important function in the public school," Smith says. From this it follows that music must be made an accepted part...
of the pupils' daily lives. Music must be made to matter to pupils, and it cannot matter to pupils unless pupils consciously connect music with their own purposes and needs. Making music an accepted part of the daily lives of students poses an incredible challenge to the music teacher. The way to integration of arts and experience is beset with problems in the structure of society which are mirrored in the structure of the school curriculum. If the society is separated into various classes and cliques, likewise the school suffers from this compartmentalization of subjects. Subject areas are set apart from one another for presentation to students in designated time segments. Music does not escape compartmentalization any more than does reading, writing, social studies, and math. In addition, music and the other arts suffer from the stigma of being "not quite academically respectable" study areas. The challenge of making music an integral part of students' lives involves then the problem of curriculum reform. One would find there a great argument in favor of a curriculum based on esthetic education: a curriculum which seeks to teach students through feelings. After all, Dewey believed that emotion is the "cementing force" in a work of art, and no one can ignore the effect that emotion plays in our daily lives. It would seem that esthetic education might help to break down some of the barriers between subject areas, break down barriers separating intellect from the senses, and thus break down the barriers between art and experience. For too long the schools in their emphasis on acquisition of intellectual skills have left the emotions outside the school doors; they have ignored the important function that emotion and the senses play in our everyday lives and in our awareness of the world around us. Of course, the music educator alone cannot make all the desired changes to better school organization; "all [he] can do, pending reform, is to seize every opportunity to make music a part of pupils' lives by breaching as many barriers as he can."  

CURRENT MUSIC EDUCATION CURRICULA  

Musicians and music educators have made attempts in the last ten years to revitalize the school music program. There have been symposiums and meetings which have led to the development of new curricula, such as the Manhattanville curriculum, the Juilliard Repertory Series, the Hawaii curriculum, and the Contemporary Music Project. This last curriculum, the Contemporary Music Project (CMP) will be the concern of the final portion of this paper, for the CMP has embodied in its guidelines the essential ideas of John Dewey's esthetic theories.  

The CMP had its beginnings in the Composers Music Project, a project funded by the Ford Foundation from 1959 to 1963 and which placed young composers in selected secondary schools around the country. The projected outcomes of such a move were fourfold: it was hoped that 1) direct experience with interested young students would prove an incentive to the composers themselves; 2) that the musical life of the community would be enriched by the composer's presence; 3) that the composers would expand the repertoire of contemporary music for secondary schools; and 4) that the composers would help to create a receptive audience for their works. The emphasis of the project was on the principles and practice of comprehensive musicianship; the repertoire of the performing groups was expanded to include contemporary compositions and a wealth of music from different cultures and different periods. Even after the funds ran out for the Composers Music Project, the interest of music educators in the philosophy and objectives behind the project did not wane.  

In 1967 a symposium was held at Tanglewood; it comprised people from all different fields concerned with the future of music in American society. The result of their meeting was the Tanglewood Declaration, a series of eight proposals to be considered by musicians and music educators. Some of the ideas articulated at Tanglewood included the following:
1. "Music serves best when its integrity as an art is maintained." This idea came as a reaction to the conception in many schools of music class as an hour of fun, useful to the enhancement of other core subjects, particularly social studies. The Tanglewood participants asserted that music deserves consideration as first-rate subject matter.

2. "Music of all periods, styles, forms, and cultures belong in the curriculum." For many years music of the European tradition had dominated public school music. Students did not relate this music to the music that they were accustomed to hearing in their everyday lives. This was just another manifestation of the museum concept of art: students learned about "great music" in school and "great music" had little effect on their daily lives. The expansion of the music program to include all types of music, including pop music and not to the exclusion of European masterworks, indicated a broader outlook of music as "organized sound" and a positive step in the direction of making music more meaningful in the lives of the students.

3. Adequate time should be provided for music in schools ranging from pre-school through college level.

4. Music educators should take advantage of the latest developments in educational technology and television in the teaching of their subject.

5. Greater emphasis should be placed on learning of the individual.

6. The music education profession should assist through the area of music in the amelioration of social problems like those in the inner city.

These ideas were mere suggestions for the directions that music education should take in the years to come; they were not a curriculum. Born out of the defunct Composers Music Project and the ideas of the Tanglewood Symposium was a new project, the Contemporary Music Project. David Willoughby served as administrative associate for the new CMP (now known as the Comprehensive Music Project) from 1970 to 1973, and he was the one to set forth the seven guidelines of the project which follow.

1. Comprehensive musicianship emphasizes the concept of humaneness in teaching. Music and the arts have been recognized as occupying a significant place in the contemporary curricula to develop the emotional and value decision-making processes with students. The purpose and responsibility of music educators is to be sensitive to the human condition and to develop in students an aesthetic awareness, creativity and skill which can serve him in contemporary society.

2. Comprehensive musicianship coincides with trends in education which emphasize long-term objectives, more precise measurement of aptitude and achievement, intrinsic motivation, social/personality development, and an approach to learning which emphasizes conceptualization of structural principles inherently part of each discipline.

3. The theory and practice of comprehensive musicianship is an approach to music teaching and learning which draws from many learning theories. Gestalt psychology, however, serves as a foundation for the CMP approach. Essentially, Gestalt psychology as applied to music learning approaches Gestalt psychology as applied to music learning approaches music as a totality through a process of...
discovering relationships of constituent elements which contribute to an understanding of the whole. Related educational theories advocated by Whitehead (discovery method), Dewey (growth through experience), Mursell (learning as differentiation and integration of whole concepts), Bruner (spiral learning), and others have contributed significantly toward redefining the nature and structure of the music discipline and its implications for curricular development.

4. The behaviorist/associationist theory of learning emphasizing memorization of facts, rote learning, drill for attainment of musical skills, and programmed instruction are recognized as valid strategies only if they are employed within the broader framework of contributing to musical understanding. From the CMP perspective, music educators in the past have predominately utilized behaviorist/associationist strategies in developing music curricula which has lead to fragmented knowledge and skill development. The limited results of the traditional music program based on this approach has provided the impetus for the CMP to incorporate the Gestalt theory of learning as a more valid base for developing broader and more meaningful musical understandings.

5. The essence of comprehensive musicianship is based on the belief that music is a discipline and an art form founded on essential issues, concepts, and principles which remain unchanged at all levels of maturity. The learning experience is keyed to the need for a developmental music curriculum which permits students to explore and discover the fundamental ideas of the music discipline at successive higher levels of understanding. CMP has been very influential in formulating a system called the "common elements approach" to serve as a means for investigating, describing, and responding to music phenomenon. From the CMP perspective, all musics regardless of cultural, ethnic, or style period background have commonalities (and differences) which can be perceived and conceptualized at a level of understanding. The degree of sophistication in a student's ability to understand and therefore respond to the music stimulus is proportional to his ability to internalize the basic principles which are interacting within that piece of music. The common elements approach then, is a framework of fundamental principles through which a developmental curriculum can be built to provide sequential learning experiences which can lead to music understanding and music sensitivity.

6. Comprehensive musicianship implies that the rightful content of the music curriculum should include the study of all musics representing many cultures, style periods, and ethnic origins.

7. Finally, comprehensive musicianship is dedicated to the principle that music learning is a creative and exploratory enterprise. It calls upon the need to involve students in a wide variety of music experiences. Regardless of the intended emphasis of any music course (e.g. theory, performance classes, music history, etc.) basic listening (analysis), performing, and creating (composing) experiences should be an integral part of the student's music education at the public
school and lower undergraduate college level. 58

The writings of Dewey among others were consulted in the formulation of these guidelines, and for this reason valid relationships can be cited between the aesthetic theories of Dewey and the philosophy and objectives of the CMF, though similar relationships are apparent in many other contemporary curricula.

The task of finding relationships between the CMF guidelines and the contextualistic rationale of music education is a fairly simple one, if one examines each individual guideline in view of what it contains of Dewey's aesthetic theories. Not all of the guidelines are applicable; some make direct references to learning psychologists such as Bruner.

1. "Comprehensive musicianship emphasizes the concept of humanness in teaching." Music has a significant part in developing the emotional and value decision-making processes, to develop aesthetic awareness, creativity, and skill which will serve the student in the future. The essence of this first guideline is basically Dewey's whole aesthetic theory. The contextualistic rationale for music education emphasizes the two factors of motor preparation and values brought from past experiences which are necessary prerequisites before a person can esthetically perceive a work of art. To understand the meaning of music heard one must have had prior experience in working with the dimensions of music, and in working with them in the various capacities of performance, composition, and listening. These are the necessary technical skills, the motor preparation. Developing aesthetic awareness is the difficult factor—how to get students to relate qualities of their own past experience with qualities in the music. This problem must concern itself, in addition, with the ills of modern society—what kind of past experience does the child bring with him to the musical experience? The quality of his own experience will either enhance or severely limit his capacity to enjoy an aesthetic musical experience.

So much of our daily experience is incomplete and unfulfilled. Activities start and stop before completion; there are interruptions in goals, and interests waver. Changes either come rapidly in our speeded-up world of technology, before we can grasp them, or else the routine becomes so hum-drum that boredom replaces an active interest in life. This is non-aesthetic experience. Goals are not reached or perhaps never even set. Contrast this with an aesthetic experience which has a beginning, an end, and a logical development leading from one to the other. It has a total quality or air about it which characterizes it and marks it as an experience. A work of art, or a piece of music, concentrates experience in this way. It is decidedly aesthetic, containing all of these stated qualities. The problem of the music educator is to find the way to make a connection between the daily experience and the aesthetic experience of a work of art. Experience is common to both, but art is able to concentrate and organize experience in such a way that the experience reaches fulfillment and becomes aesthetic. This summary will suffice here, as the subject has been covered quite thoroughly in other sections of this paper.

The writer must stop a moment and ponder the phrase, "emotional and value decision-making processes." Decision-making has become a concern of educators in recent years. Traditional classrooms gave students very little opportunity to exercise this valuable capacity; information was handed down—no questions asked. Students of today are forced to make important decisions about drugs, sex, drinking at a much earlier age. Educators have been rightly concerned that with no previous experience in making decisions and judgments, young people would be much more vulnerable to making poor and reckless decisions which could have a disastrous effect on their lives. Music and the other arts have always been acceptable emotional outlets in the school organization. Music has in fact found its strength and support largely in the area of performance, and to some extent listening. Creative exercises and elementary composition have just entered the scheme of things and have given the subject of music back its integrity. Educators
have realized that creativity in working with musical materials demands that students not only use their acquired knowledge, but requires them to make judgments as to what sounds best or what feels right. Composing, the creative act, demands the conscious activity and cooperation of intellect, will, and senses. These faculties must combine and work together in making decisions about organizing musical materials, and at the same time making value judgments about the effect of the sounds. It combines the act of creation and perception, of doing and undergoing; and thus it helps to break down one of the barriers separating the creative artist from the aesthetic perceiver. At the same time it serves to bring art closer to experience in general. Composing demands a human being totally awake and alert in all his capacities; composing for all of these reasons helps to create an atmosphere in which students can have esthetic experiences in the classroom.

Dewey has said in the past, "The basic trouble with much teaching is that it does not create wants in the mind, wants in the sense of demands that will go on operating on their own initiative." Composing answers this need in part because it demands individual thinking and evaluating on the part of the students, occupations of secondary importance in performance classes.

Numbers 2, 3, 4, and 5 of the guidelines stress ideas and psychologies other than those of John Dewey; if one searches one could probably find parallels between Dewey, certain educational trends and Gestalt psychology listed here. The present interest, though, is in finding more direct and valid relationships.

6. "Comprehensive musicianship" should include the study of all music representing many cultures, style periods, and ethnic origins. This implies also contemporary music, both serious and popular. The expensive repertoire for use in the classroom serves the function of broadening the awareness of the students. In presenting the music of the past, the present, and other cultures, the music educator is affording students the opportunity of looking at their own experience in general and contrasting and comparing it with other modes of experience. The expansion of awareness of the world--to see new relationships and new meanings--falls into Dewey's view of education as growth. There are additional advantages to such a broadened perspective. Through the use of contemporary music in the classroom, the teacher helps to build a bridge between everyday experience as the children know it and classroom experience with music. Rock music is a common background for most children; by including it in classroom activities the barriers separating school from "outside" life and thus art from experience are broken down. A continuity is effected between music of everyday experience and music studied as an art in the classroom. Contemporary music, in general, because it grows from the sounds of our technological age, builds a common bond between music as an art and experience in general. Composers use the media, the instruments, the sounds that are part of their own experiences--today that includes the spectrum of electronic equipment. Children, too, have spent their entire lives surrounded by sounds of machines; electricity and electronic sounds are their shared background, conscious or not. Contemporary music in the classroom then ties in experiences of everyday life with music experiences in the classroom. The use of today's music helps to re-create a continuum between experience in daily life and art as experience.

Music of the past and of other cultures finds its raison d'être in the classroom in the concept of civilization and what it means to be civilized. One needs to refer back to the definition of the verb "to civilize" as "to instruct in the arts of life and thus to raise in the scale of civilization." Instructing in the arts of life means more than merely gathering information about them; it also implies participation in the arts of life and a sharing of values. Works of art, because they are concentrated experience, "are the most intimate and energetic means of aiding individuals to share in the arts of living." Other cultures of the past and present themselves to us most intimately through their works of art. Very often the only existing link with past civilizations is their works of art. By experiencing the art of
other cultures, the perceiver is able to experience some of the deepest elements of experience in that culture. His own awareness of the world is expanded because he can view the experience of his own culture in light of another mode of experience. His experience is broadened and deepened because he has shared in a new way of experiencing the world. The arts of life can be understood to a greater extent when viewed from a distant perspective in time or space. The aesthetics of Dewey always revolve around the integration of experience towards the aesthetic, and growth of the individual in an ever expanding awareness of the world. (One might contrast this broad outlook of musical styles with the more limited view of the Manhattanville curriculum, which finds relevance only in the study of music of our own contemporary culture.)

7. The final guideline advocates the need for the varied experience of listening, performing, and creating in the music class. No matter what the emphasis of the individual course --history, theory, performance--a variety of musical experiences is required for greater understanding of music as an art. Each activity adds a new dimension to the study of music; it opens another door to understanding. Aside from this, there is one other reason for varied activities. Not all students are alike. They have different interests, differing capabilities and talents. One student may have a beautiful voice, or another may be extremely creative in composition, another may enjoy the mathematics of theory, or another history, or one may have studied an instrument for a number of years. If only performance courses are offered in the school, there is no opportunity for the students interested in other emphases. A one-sided performance course can cater to only a select few. And in this case it isn't even a good situation for the chosen ones, because they are not receiving comprehensive instruction in music. Their understanding of the music they perform is limited. There are two failings in this situation: performers get a one-sided view of the art of music; and the non-performers are not given the opportunity to discover or use their own particular talents.

The idea of comprehensive musicianship answers the need illustrated in this example. The variety of activities guarantees that for everyone there will be some area touched on in which the individual student can exercise his abilities and talents. In this way music becomes accessible to far more students than it did in performance-oriented situations. The student "who says he can't carry a tune in a bucket" is not forever relegated to the sidelines. Variety of activities affords the teacher the possibility of reaching more students. Perhaps the most important thing they will learn is just a healthy attitude toward music. Dewey states, "Perhaps the greatest of all pedagogical fallacies is the notion that a person learns only the particular thing he is studying at the time. Collateral learning in the way of formation of enduring attitudes may be much more important. For these attitudes are fundamentally what count in the future. The most important attitude that can be formed is that of the desire to go on learning."58

The teacher can develop interest and the desire to learn more about music in students with various activities using the materials of music. Even the performance-oriented can benefit from added activities of listening and composition. As mentioned they receive a broader background of musical experiences and expand their total understanding of music.

It is hoped that in the preceding discussion, the objectives of the CMP approach to music education were satisfactorily related to Dewey's concept of art as experience. The CMP made direct use of Dewey as a source when outlining their guidelines. Other approaches have utilized his ideas less consciously, for portions of his aesthetic theories are apparent in aspects of the Manhattanville and Hawaiian curricula. Psychologist-educator Asahel B. Woodruff based many of his teachings on ideas of John Dewey.

In a way one could say that John Dewey is a man whose time has come. So many of his ideas are applicable to our world today. He is like the voice for a general attitude now coming into vogue. Alfred North Whitehead said, "We are living in the midst of the period subject to Dewey's influence."59 The writer of this paper mentions this, because so many music methods are
appearing today which in their basic design
echoes the esthetic theories of Dewey. Perhaps
Dewey's popularity in contemporary thought is
another indication of the widespread acceptance
of Orff Schulwerk in America. There are similar-
ities of thought to be found between Dewey and
Orff, though no direct influence could ever be
postulated. Dewey has been an imposing figure in
the education scene; he has much to say to con-
temporary society. The complexity of our society
has segmented the population into classes and
cliques. Divisive tendencies have split work
apart from play, creative thought from physical
labor, art from experience. People will need to
come to terms with science and technology; they
cannot be ignored, but must be accepted and
integrated into the rest of life. The Industrial
Revolution took place a long ago. Its effects
cannot be erased; they must be dealt with.
The writer would like to end by quoting from

When the arts are an integral part
of the communal activities of a society,
they make the community of men's inter-
est visible to everyone. Each individual
has a sense of identification with the
society in which he lives and a sense of
loyalty to his fellows which goes much
deeper than intellectual commitment or
even patriotic fervor. The delicate
task of achieving both solidarity and
personal freedom at once depends on
every individual's awareness of the com-
munity of men's interests. It is not
too much to say that the success of
democratic government depends partly on
making the ordinary man and artist
matter to one another.60

1Sam Reese, "How Do Your Ideas about Music
Affect Your Teaching?", Music Educators' Journal
(February, 1976), pp. 84-88.
2Ibid., pp. 84-88.
3Robert Clifford Smith, "Esthetic Theory
and the Appraisal of Practices in Music Educa-
tion," Dissertation, University of Illinois at
Urbana, 1964, p. 3.
4Charles W. Eliot, Living Ideas in America
5Smith, Dissertation, p. 50.
6Ibid., p. 90.
7Ibid., p. 82.
8John Dewey, Art as Experience (New York:
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A special note of thanks goes to Dr. Arthur G. Wirth for the time he spent in discussing the topic with me.
Any consideration of the musical characteristics of the pre-adolescent and adolescent should include a consideration of the role of the intellectual processes in musical learning. Piaget's final stage of intellectual development, that of formal operations, can provide insight into the intellectual growth of the adolescent. Piaget characterizes the thought processes of childhood as concrete operational. During this period a child's hypothetical problems. The stage of adolescence, however, coincides with the appearance of formal thought structures. Now the youth begins to use a more systematic approach to problems, delighting in considerations of abstract theories and "what if" hypotheses. Piaget views reversibility of thought as the culmination of intellectual growth.

The development and organization of formal thought are dependent upon both the maturation of mental processes and the social environment in which the adolescent lives. Maturation of mental structures determines only the potential boundaries wherein an individual's thought can develop. The social environment is an indispensable factor in the release and the realization of these potentialities. (6 passim)

Ability to theorize provides the adolescent with a basis for the cognitive and evaluative judgments which he finds increasingly necessary to form. These judgments will eventually liberate him from the confines of childish thinking and allow him to assume an adult role. The ideas and ideologies of groups to which he is exposed furnish the material for his reflective decisions. The peer group contributes to conformity and is an important forum for the initial discussion of ideas or testing of theories.

Values and modes of behavior from the social environment are part of the raw materials from which the adolescent fashions his values, affective reactions, and behavior patterns. Even though he is capable of intellectualizing his decisions, the interaction of environment and intellect is crucial in their formation. And so the combined forces of intellectual structures and social interaction influence the value system with which the emerging adult will enter adult society. In short, the affective development of the adolescent parallels the cognitive development and with the attainment of physical maturity, an adult personality is formed. As Claparède has indicated, "Intelligence furnishes the affective [development] with its means and clarifies its ends." (6 passim)

Unless a student has had individualized instruction on an instrument, his intellectual capacities and affective reactions will generally exceed his performing capabilities. Adolescents are self-conscious about this because they are capable of creating a hypothetical, imaginary audience that listens and criticizes. Herein may lie an unspoken reason for "dropping out" of instrumental study.

The importance of understanding adolescents and their needs and interests cannot be stressed too much. The study of adolescence from the viewpoint of its psychological and cultural dimensions is essential. Dealing with behavior, communicating with adolescents, selecting and arranging appropriate musical experiences demand a sophisticated understanding and appreciation of the characteristics and sub-culture of teenagers. Unfortunately, many of the frustrations and failures of teachers are the result of miscalculation of the interests and capabilities of students of this age level.

With this psychological frame of reference, let us briefly consider the development of musical thought, the development of musical taste, and the role of popular music in the curriculum. Musical learning is wholly dependent upon the perception of sound. In early childhood perception plays a paramount role in the child's thinking. Even very young children can behaviorally demonstrate absolute pitch. In fact, age and ability to discriminate pitches have been found to be positively related, with the greatest
increase in ability occurring with younger children.

From perceptual learnings develop the relational concepts which permit an individual to think about what has been perceptually experienced. Music is more than just a sum of perceptual discriminations. Music consists of an organization of patterns of sound and silence within a temporal structure. For music to be fully appreciated, understood, and performed, concepts pertaining to the relationships of melody, rhythm, harmony, and form must be learned.

Intellectually, the pre-adolescent and adolescent are able to understand and use the following relationships:

Rhythmic: meter
relational time values
augmentation and diminution

Melodic: scale and mode structure
transposition
inversion
retrograde
retrograde - inversion

Formal: repetition and contrast - rondo
variation technique
imitative techniques - fugue
sonata allegro

Harmonic: consonance and dissonance
contrapuntal techniques
tonality and atonality

This is not to say that elementary music education will have provided adequate background for understanding these relationships, although primary and intermediate music programs should have provided an organizational framework of aural discriminations and relationships.

Music taste can be defined operationally as the combination of attitudes toward music, musical preferences, and musical discrimination. Although musical taste obeys social principles, individual differences of considerable magnitude will naturally be present in this behavioral area, just as they are in all other socially significant realms of human response. (4 passim)

The communication expectancies one has, the attitudes built up in one toward mode, finiality, key, and other effects, all quite clearly form a part of musical taste. These expectancies can be the result of education and/or peer group preferences.

Musical taste acts like other social phenomena of our culture and not in isolation or as if it were obeying some absolute law. As social attitudes tend to strike different world areas at somewhat different times so do trends in musical taste. This can be seen in the way in which pop groups build a following first in one geographical area and then another.

Several research studies have been undertaken to assess the musical taste of children and adolescents. These range from samplings of opinion to more detailed and sophisticated methodology. Findings from studies indicate that repeated listening leads to higher preference scores for both classical and contemporary music. One study gave evidence that middle school students seem to prefer contemporary music to music of earlier periods regardless of the study or lack of study of contemporary music. (1 passim)

Bradley's (1972) investigation of the "effect on student musical preference of a listening program in contemporary art music" for seventh grade students indicated that a sequence of cognitive learning experiences based on an analytical approach to listening resulted in an affective transfer. Analytical listening and repetition resulted in greater preference change than repeated listening alone, although repeated listening without special study also aided the development of positive preferences. The control group showed no such preference gains. (2 passim)

Research findings support the general assumption of music educators that adolescents have a marked preference for music is sentimental, highly emotionalized, strongly rhythmic, distinctly melodic, and with lyrics which contribute to this over-all, total effect. These are all attributes readily found in popular music.
Another reason for the popularity of commercial music is that peer rewards for listening to teenage music are more immediately, frequently, and tangibly acquired than adult-sponsored rewards for serious application to school work, which tend to be delayed and intangible. In the process of acquiring stable role differentiations, adolescents rely upon lyrics of teenage music for solace, for a guide for expressing their own feelings, or for articulation of their own fantasies. (3 passim)

The results of research findings, confirmed by the reactions of secondary school students today to current popular music, indicate that this style is an important point of contact for the introduction of other styles of music. Quotations from the classical repertoire in rock and roll orchestrations indicate that teenagers are receptive to classical music. The point is not so much to lure adolescents away from popular music, but to alert them to the limitation of music that is formulaic and attuned to commercial standards.

The cultural settings and media of popular music provide external relations similar to those of both folk and art music. In dealing with music which is most preferred and is most familiar to the students, the teacher can overcome the initial barriers of foreign style that might hinder aural perception. Popular music provides as a point of departure that music which is already firmly a part of the students' tastes. It is this strong acceptance that can serve as a model for the growth and spread of musical preferences in other musical styles. Since it has been accepted by the adolescent audience, the inclusion of popular music in the curriculum can be seen as an extension of the continuity between school and out-of-school life.

The ingenuity and understanding of the teacher are of prime importance in the presentation of pop music in the music curriculum. Educators must be careful not to adopt a patronizing attitude in their presentations. Although many of the methods applicable to presentation of art and folk forms may also be applied to presentation of pop forms, the teacher must be aware of the charged emotions, the rapid changes, the hypnotizing appeal of the style, and the numerous and subtle connections of this music to other musical styles.

Credibility is one of the main criteria for a course involving popular music. If the teacher subscribes to a peripatetic in the field, he will find it easier to keep abreast of new performing groups, new recordings, and new stylistic tendencies. It is unwise to use the popular music from one's own adolescent years unless this music has already become a part of the nostalgia craze.

Recordings of popular music are numerous, and proper selection according to teenage taste and currency is difficult and expensive. Credibility may be ensured by requesting the students to bring their own records. Given a day or two to work with the records before class presentation, the teacher can quickly analyze the music for form, melody, texture, rhythm, and harmony. Objective detection and analysis of these elements may be difficult for the student at first. Such analysis requires the separation of an objective aural perception from the student's heavy dependence upon the lyrics and his subjective response to them.

One of the avenues to musical learning is through creating music. The creative form of much popular music leads to improvising and a discussion of different styles of performing the same tune. These experiences do not require an extensive theoretical background in music. Addition of a rhythmic accompaniment to a ballad, work with standard rock and gospel harmonies, creation of a hypnotic ostinato figure—these are all creative experiences that can be exploited to give students a foundation in the structure of music. Through these experiences the students learn not only about the end product, i.e., the music; they also learn something about the process through which the product is shaped.

In summary, the following principles for the selection of listening repertoire are offered to aid the teacher in the fluid context of daily classroom teaching:
1. Beware the parochial and provincial attitude which can underly the classification of music as youth, pop, European, black, white, etc.

2. Provide a variety of materials for exposure to the diversity of man's musical expression.

3. Select musical literature that best illustrates the concept under study, regardless of its cultural milieu.

4. Provide materials and time for in-depth study and reflection so that emerging concepts have a chance to solidify.

BIBLIOGRAPHY


A BRIEF HISTORICAL STUDY OF THE SINGING SCHOOLS AND SHAPE NOTES AND IMPLICATIONS FOR MUSIC EDUCATION TODAY

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One of the most crucial problems faced by early music educators in the United States was to successfully teach the skill of music sight-reading. Rev. John Tufts in his "Introduction to the Art of Singing Psalm Tunes" and Rev. Thomas Walter's "Introduction to the Art of Singing by Note" attempted to eliminate the unpleasant sounds often heard in the church by teaching people a system with which the proper notes could be accurately recalled. Rev. Walter wrote of the need for delivery from this chaos when he said,

The tunes are now miserably tortured and twisted and quavered in our churches, into a horrid medley of confused and disorderly voices. Our tunes are left to the mercy of every unskilled throat to chop and alter, to twist and change, according to their infinitely diverse and no less odd humours and fancies. I have myself paused twice in one vote to take a breath. No two men in the congregation quaver alike or together. It sounds in the ears of a good judge like five hundred tunes roared out at the same time, with perpetual interferences with one another.

The publication of these two books led to the development of the singing school, a movement which would eventually bring about the inclusion of music education in the public schools. The singing school movement spread very rapidly and people did indeed improve their music reading skills. Logically then, one might well expect the populace of the United States to be very literate musically today. However, this is not true. Music educators are still faced with the problem of "how to" teach music reading
successfully. The majority of the musically literate are those who have had experience with instrumental music. Without the use of some kind of instruments in either the instructional program or outside on their own, only a very small minority of the people enrolled in public school music classes today learn to read music well.

In this bicentennial year, it seems especially appropriate to examine the early work of Rev. John Tufts, Rev. Thomas Walter, and others involved in the singing school movement, in an attempt to find answers to these questions:

1. What historical development brought about the inclusion of music in education as we know it today?

2. What role did the singing schools play in the history of music education?

3. What advancements were brought about by the singing schools in the area of music reading?

4. Why did these advancements not become an integral part of our music programs in the public schools?

5. What potential for music education today does the "shape note" system hold?

A BRIEF RÉSUMÉ OF AMERICAN MUSIC EDUCATION

"No human society has been found which has not practiced the art of music and music education." Certainly the early American colonists were by no means without the need and desire for music. They brought with them many musical backgrounds from their respective countries. These people, in the pioneering spirit, were creating a new culture in keeping with their new environment. The institutions which had supported music in the homelands were not available to the colonists; their most urgent need for music came from the church. It is logical then that the origins for music education might be discovered in a search for the improvement of music in the church and it is also logical that new forms of music and music education indigenous to the needs and means of the colonists should develop, even though the influence of the European countries from whence they came would serve as an initial point of departure.

The early churches in the United States made exclusive use of "lining out" in their services of worship. That is, a leader sang a line of the song and the congregation answered in response. There were no printed hymnals or tune books and the accuracy of recall rested solely upon the ability of these song leaders to pass on correct notes and words. Many of the leaders, because of faulty memory, limited vocal ranges, and a desire to embellish or change the tunes did not accurately recall the music of the church. This was a great concern to many of the ministers. As a result, it was the ministers who began a movement to better the music of the church.

In 1712 the Rev. John Tufts, published the first practical instruction book in singing. It was entitled "A very plain and easy Introduction to the Art of Singing Psalm Tunes; with the Cantus, or Trebles, or Twenty-eight Psalm Tunes contrived in such a manner as that the Learner may attain the Skill of Singing them with the greatest ease and Speed Imaginable." It was printed in letter notation (a system still used today in many parts of Europe) and was extremely successful. The first instruction book with conventional staff notation appeared in 1711. "The Grounds and Rules of Musick explained or an Introduction to the art of Singing by Note" was written by Rev. Thomas Walter and was said to be "the first music printed with bar lines in America."

The influence of these two books was so great that by 1723 "the churches of Boston, Roxbury, Dorchester, Cambridge, Taunton, Bridgewater, Bradford, and some others had commenced singing by 'rule and art.'"

As the use of these books spread, the better singers in the congregations tended to sit together and gradually formed themselves into choirs. The organization of choirs brought about a new need—that of a choirmaster. As
singing teachers were found to fill this new responsibility, the quality of singing and instruction was improved. The choirs began to take on a school setting and as a result the "singing school" was born. For nearly a century these singing schools flourished and served as the primary educational institution for the teaching of music "by rule." Outstanding men such as Francis Hopkinson, William Billings, Oliver Holden, Daniel Reed, and Lowell Mason, through their work as singing masters, changed the entire complexion of music and music education in the United States and provided a broad base for the programs which were to follow.

The singing school movement generated a great deal of interest outside the church too. Symphony orchestras began to spring up, choral societies were formed, and mass singing school conventions were convened. These conventions were three or four days long and usually dealt with methods and materials, vocal problems, elementary harmony, and conducting. The conventions were eagerly accepted by Americans and the many people involved in them were to become the first public school music teachers and supporters. Because so many people were becoming convinced of the impact and value of music education, Lowell Mason was able to set up a program of music instruction at Hawes School in Boston in 1838. This program was introduced as a result of a series of petitions made by a citizens' committee. The philosophy of the program was music education for every child. Soon afterward, Neef (a co-worker of Pestalozzi) and Lowell Mason collaborated to incorporate the Pestalozzian practices into the music education program.

Until about 1900, music in the schools was primarily vocal. In the first decade of the twentieth century several school orchestras were organized. The school band made its appearance in the years immediately preceding the First World War. In 1907 the Music Supervisor's Conference (today known as the Music Educators National Conference) was founded. In 1928 the first national music contest and the National Music Camp at Interlochen, Michigan, were founded. Performance, competition, limited repertoire, and an undue emphasis on showmanship and pure technique were predominant and this carried over very strongly until the middle of the twentieth century. Today the emphasis is reverting to Lowell Mason's concept of "music for every child" and it is this emphasis that has encouraged this writer to look to the singing schools for a solution to the "music literacy" problem facing education in an attempt to educate every child.

THE SINGING SCHOOLS

Of all the musical activities and institutions that have been evident in the United States, the singing school emerges as the most uniquely American and as the most dominant historical factor in American music. The real beginnings of the singing school may be traced back to 1721 when Rev, John Tufts wrote his previously mentioned "Introduction to the Art of Singing Psalm Tunes." This book, and many others which followed, served a dual purpose: that of an instructional manual and that of a collection of songs. It was these books which were used by the singing masters in their schools.

The singing schools started in the churches as a means of improving singing in the church, but soon they were such a popular attraction that they were expanded as a social institution—a place where one could enjoy music with friends. The school usually consisted of a series of classes held in any convenient place—a church, a private home, a court house, a schoolroom, or even on occasion a tavern. The classes were most often held in the evenings during a season of the year that was least busy for the participants. They lasted anywhere from six weeks to three or more months with one to five classes per week.

George Pullen Jackson describes the singing school master as a man who "steeped his talents in spirit."

He would often come to a town and start a popular subscription to pay for the school. A wealthy man would often refuse to have any part in it, declaring, in sentiments that are not yet entirely obsolete, that 'if anyone wishes to learn to sing, let him pay for it,' by taking private lessons, of course. A hall in a tavern was the usual place of meeting.
The landlord made the rental cheap in consideration of the patronage which his barroom enjoyed during recess and afterwards. The singers brought their own candles, used improvised benches on which to lay the books and to set the candles, and sat in a semicircle two or three rows deep. The pupils were taught the clefs, syllables or notes, semiquaver, demisemiquaver. Then they sang a song through by note (syllables), part by part, and time after time. And not until it was thoroughly learned were they allowed to sing the words. The music was usually in three parts—air, bass, and counter. The air "lead" or tune, was sung by males of the higher-voiced type, the bass by the deep-voiced males, and the counter (a sort of tenor part) by the females. Everybody beat time with the right hand while singing. The beating was usually merely up and down. But three-part timing demanded, and sometimes got, a three-part beating: (1) fingers on the table, (2) flat hand on the table, and (3) hand raised.

The singing-school term seldom exceeded twenty-four afternoons and evenings. The sessions were three hours long. The objective of all this activity was realized in the final "exhibition" which was held in the "meeting house." Here the whole class showed what it had learned. And in the exhibition singing, all that remained of the solmization practice of the singing school was the chord that was sung before the piece started. When the singing master left for other fields, his pupils filled the ranks of the church choir.

The singing school also served as an outlet for many sales of the dual-purpose tunebooks. As evidenced by the many different tunebooks, prepared by many different singing masters, a large part of the financial support was realized from the sale of the tunebooks. It is also important that the tunebooks were kept in the hands of the "graduates" of the singing schools, because the conventions and annual meetings of these "graduates" served to perpetuate the tradition and interest in "singing by rule" for nearly a century in the North and soon spread to the South where a tradition was established that still exists today, particularly in many parts of Appalachia and Texas.

**SHAPE NOTES**

The popularity of the singing school and the extensive sale of tunebooks brought about a great deal of competition and interest in devising a "better system of instruction." About 1798, a dabbler in music named William Little submitted the manuscript for his "Easy Instructor" to the Uranian Society of Philadelphia (a singing society or convention). He was extremely interested in obtaining their endorsement of his new system. After careful examination, a committee of the society reported that "having carefully examined the 'Easy Instructor,' we find it contains a well digested system of principles and rules, and a judicious selection of tunes; and from the improvement of having only four significant characters, indicating at sight, the names of the notes . . . this book is considered easier to be learned than any we have seen. The Committee are of the opinion the Author merits the patronage and encouragement of all friends to Church Music."10

Little had his book published in 1802. His "new system" was so popular that his copyright was twice infringed. Finally, he sold his copyright to Daniel Steele and Charles R. and George Webster. They quickly applied for a patent on the type used for setting the notes and were able to make a great deal of money by selling rights to the use of the "patent notes" as they came to be called. This system was so effective that subsequent versions of singing school tunebooks used his shaped notes except in some instances in which other, more complex systems of shaped notes were devised.
Little's basic idea was so simple, it is surprising that no one had thought of it before. He used a differently shaped note head to represent each of the syllables used in solmization. The rhythmic representation remained the same as in conventional notation. To further simplify reading, he made use of the Lancaster Sol-Fa system in place of the more commonly used seven-syllable tonic Sol-Fa system. This required the use of only four pitch indicators to comprise the patterns of pitches found in the scales and songs. Little used a triangular note head for fa, a round head for sol, a square head for la, and a diamond head for mi. By combining two fa, sol, la patterns and one mi, he was able to make a major scale. Each of the two fa, sol, la patterns maintained the same internal whole step structure, thus eliminating the need for seven distinct shapes.

The notation is shown in the illustration below for a C major scale and is compared to our modern-day round notation.

William Little's shaped notes--C MAJOR SCALE

\[\begin{array}{c}
\text{fa} & \text{sol} & \text{la} & \text{mi} \\
1\text{ step} & 1\text{ step} & 1\text{ step} & 1\text{ step} & 1\text{ step} & 1\text{ step}
\end{array}\]

Round notation--C MAJOR SCALE

The quality of the reproduction is somewhat limited by the age of the book and the deterioration of the ink on the pages. The grammatical construction and spelling of words such as recited (reckoned), cliffs (clefs), triple (triple) also reflect a usage different from that of today or perhaps are merely errors on the part of the author since the spelling is not always consistent.

The copy of the book used is from the collection of the North Dakota Historical Society and is housed in the Music Library at the University of North Dakota, Grand Forks.
A CONCISE INTRODUCTION TO THE ART OF SINGING.

Music is written on five lines with their spaces called a Stave or Staff.

The lowest line is always reckoned the first. The spaces are counted in the same manner. They are also reckoned by the seven first letters of the alphabet, A, B, C, D, E, F, G.

The situation of these letters on the lines and spaces are known by Cliff or Cliffs prefixed to each Stave. The Cliffs are placed on the letters which they represent, and are called by the names of these letters. The letters on the other lines and spaces of the Stave, are reckoned from their Cliffs letters.

There are three kinds of Cliffs, or more; but two only are now in general use for Vocal Music; and these two are all that are used in the present work. They are as follows:

SCALE OF MUSIC.

THE SCALE DIVIDED.

Showing the connexion of the different parts of music, as they are arranged in this work.

ALTO:
Highest male, and lowest female and boy's voices.

TENOR:
Male voices.

TREBLE:
Highest female voices.

BASS:
Lowest male voices.
INTRODUCTION TO THE ART OF SINGING.

OF NOTES AND RESTS.

There are six kinds of notes now in use, with their corresponding marks of silence, called rests, as follows:

**Semibreves.**
**Minims.**
**Crotchets.**
**Quavers.**
**Semi-quavers.**
**Demisemiquavers.**

The proportions the notes and rests bear to each other.

One Semibreve is equal to
2 Minims, or
4 Crotchets, or
8 Quavers, or
16 Semi-quavers, or
32 Demi-semiquavers.

The rests denote a silence equal to the length of the note they represent, and are called by the same name; viz., Semibreve Rest, Minim Rest, &c. &c. N.B. The Semibreve Rest is used to fill a measure in all the different moods of time. The forms and proportions of the Notes and Rests should be strongly impressed on the mind. A point or dot placed to the right hand of the Notes or Rests makes that Note or Rest one half longer than without a dot.

**Example.**

A **Brace,** shows how many parts are to be sung together.

A **Single Bar,** is used to divide the notes into equal measures; and all the notes contained between two single bars is a measure.

A **Double Bar,** denotes the end of a Strain, or the end of a line of Poetry.

A **Ledger Line,** is added when notes ascend or descend beyond the stave, and may be continued to any number required.

A **Hold (•)** placed over or under a Note, shows it is to be sounded longer than its usual time.

A **Flat (∧)** placed before a Note lowers it half a tone beyond its natural sound.
INTRODUCTION TO THE ART OF SINGING.

A Sharp (♯) placed before a Note raises it half a tone higher than its natural sound.

A Natural (♮) placed before a Note raises it to its original sound; that Note having been previously made flat or sharp.

Sharps or Flats placed at the beginning of a tune (called the Signature of the Key,) affect the letters on which they are placed throughout the piece, unless contradicted by the Natural, which replaces the note immediately following in its original state.

Sharps, Flats, and Naturals are termed accidental when occasionally introduced in a piece of music, because they only affect the notes immediately succeeding them.

A Slur, —— placed over or under any number of notes signifies they are to be sung to one syllable, in a smooth, gliding manner.

When Quavers, Semiquavers, &c. are grouped together, the slur is unnecessary, and is omitted in this work, but the manner of singing such united notes is the same as if the Slur were added.

The Figure (3) placed over or under any three notes signifies that they are to be performed in the time of two of the same kind without the figure; they are called Triplets.

Staccato Marks (!!) are placed over such notes as are to be sung in a short and distinct manner, observing a short cessation of sound immediately after sounding notes marked as above.

A Repeat mark shows what part of a tune is to be sung twice, and is placed at the beginning and end of the strain to be repeated.

A Repeat of words: —— shows that the last words sung are to be repeated.

Grace Notes are small extra notes which have no duration, but what is borrowed from those notes to which they are attached. They are used for the purpose of arriving at the note with more taste.

A Swell signifies a gradual increase and decrease of sound.

A Close shows the end of a tune.

Time is the manner of regulating and measuring sound, with regard to duration.

A Measure is what is contained between two bars.

Time, in music, is quicker or slower according to the nature of the piece, or the design of its author. Each measure of music contains a certain number of notes or rests, the amount of which is specified by a mode or mode of time, placed at the beginning of every tune after the Cliff.

These marks are of three kinds, viz. Common, Triple and Compound.

COMMON TIME.

First Mood has a Semibreve or its equivalent in a measure, beat with four motions, and sung in the time of about four seconds.

Example: 1 2 3 4 1 2 3 4 1234

Second Mood has the same quantity in its measure, beat with two motions, and is generally sung in the time of about two seconds.

Example: 1 2 1 2 1 2 1 2
INTRODUCTION TO THE ART OF SINGING.

**Third Mood**

A has a Minim, or its quantity, in a measure, beat as the second mood, and sung about one third quicker.

Example:

\[
\begin{array}{cccccc}
1 & 2 & 1 & 2 & 1 & 2 \\
\end{array}
\]

**First Mood**

A has three Minims, or their equivalent, in a measure, beat with three motions, and sung in the time of about three seconds.

Example:

\[
\begin{array}{cccccc}
1 & 2 & 3 & 1 & 2 & 3 \\
\end{array}
\]

**Second Mood**

A has three Crotchets in a measure, three beats, time two seconds.

Example:

\[
\begin{array}{cccc}
1 & 2 & 3 & 123 \\
\end{array}
\]

**Third Mood**

A has three Quavers in a measure, three beats, quick movement.

Example:

\[
\begin{array}{cccc}
1 & 2 & 3 & 123 \\
\end{array}
\]

**Compound Time.**

**First Mood**

A has six Crotchets in a measure, beat with two motions, and sung in about the time of two seconds.

Example:

\[
\begin{array}{cccccc}
1 & 2 & 1 & 2 & 1 & 2 \\
\end{array}
\]

N.B. The above time is varied and regulated faster and slower according to the musical terms written through music.

By beating time is meant a certain motion of the hand or foot, designed to mark the precise movement intended for a piece of music. The mode of doing this is better understood from the instruction and example of a teacher, than from any written directions. One rule is, however, to be invariably observed; namely, that the hand or foot is to be put down at the commencement of every measure, and to rise at the last division of the same.

**Examples.**

**Common Time.**

\[
\begin{array}{cccccc}
1 & 2 & 3 & 4 & 1234 & 1234 & 1211 \\
\end{array}
\]

**Triple Time.**

\[
\begin{array}{cccccc}
1 & 2 & 3 & 1 & 2 & 3 \\
\end{array}
\]

**Compound Time.**

\[
\begin{array}{cccccc}
1 & 2 & 3 & 1 & 2 & 1 \\
\end{array}
\]
OF SOLMIZATION, OR MODULATION.

In practising musical lessons, it is customary to apply certain syllables to the diatonic intervals of the octave. The end proposed is, that the same name invariably applied to the same interval, may naturally suggest its true relative and proper sound.

The names of intervals or sounds, which generally prevail in this country, are Fa, Sol, La, Mi.* In this work, (the more readily to designate those names of sounds,) each name has its respective form or shape, viz. the Fa, has a triangular; the Sol, round; the La, square; and the Mi, a lozenge form:

<table>
<thead>
<tr>
<th>SEMIBREATH</th>
<th>CROTCHET</th>
<th>MINIM</th>
<th>QUAVERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fa Sol La Mi</td>
<td>Fa Sol La Mi</td>
<td>Fa Sol La Mi</td>
<td>Fa Sol La Mi</td>
</tr>
</tbody>
</table>

The first three being repeated, give names to the seven sounds of the Diatonic Scale.

**EXAMPLE:**

**TREBLE:**

1 2 3 4 5 6 7 8 8 7 6 5 4 3 2 1
Fa Sol La Fa Sol La Mi Fa Mi La Sol Fa La Sol Fa

**BASS:**

Fa Sol La Fa Sol La Mi Fa Mi La Sol Fa La Sol Fa

The Mi, or seventh note, occurs but once in the Diatonic scale; it is the leading note, and it always regulates the position of all the other syllables, on whatever letter it may be placed.

* Pronounced Fa, Sol, Law Mi.

The natural place for Mi is on B; but is necessarily transposed into all the other (musical) letters, as occasion requires.

**SCALE OF FLATS AND SHARPS.**

But if B be flat Mi is on — — — — B.
If B and E be flat Mi is on — — — — E.
If B, F, and A be flat Mi is on — — — — A.
If B, E, A, and D be flat Mi is on — — — — D.
Or if F be sharp Mi is on — — — — F.
If F and C be sharp Mi is on — — — — C.
If F, C, and G be sharp Mi is on — — — — G.
If F, C, G, and D be sharp Mi is on — — — — D.

(The Italians use for this scale, the syllables Do, Re, Mi, Fa, Sol, La, Si, Do. Mr. Adam's used Fa, Sol, La, Ha, Do, Na, Mi, Fa; and these names in this order to the ascending Major scale, Si being the leading note for the former, and Mi for the latter scale. But the English and Americans, generally, have retained only four of these syllables; and as these answer all the purposes designed, our remarks are confined to them. Learners may apply these other syllables at pleasure.)

The Diatonic Scale of Music, is a gradual succession of five tones and two semitones in an octave, or a series of eight notes.

The first note of the Diatonic scale is a principal or Key, called also the Tonic; and the other notes are at natural fixed distances from, and sounded in strict reference to it.

There are two keys in music, and only two, the Major or Sharp Key, and the Minor, or Flat Key.

The first of these is adapted to express the cheerful passions; and the latter is expressive of the mournful and pathetic.

The Key note in the Diatonic scale No. 1., it will be seen is C, and this is called the Natural Major Key.

The Key note in the Scale No. 2., is A, and is called the Natural Minor Key. They are the only scales in which the semitones are found in their natural fixed order.
INTRODUCTION TO THE ART OF SINGING.

These Keys differ from each other, with respect to the situation of the Semitones in the Octave; the Major Key having them between the third and fourth, and the seventh and eighth; whereas in the Minor Key they are between the second and third, and the fifth and sixth. See Diatonic Scales, Nos. 1 and 2.

It must be further observed, that the Minor Scale has this peculiarity, that the ascending scale, when extended to a whole octave, differs from the descending; for in ascending, it is necessary to make the sixth and seventh sharp, but in descending to sound them, as in their natural order.

The last note in the Bass is always the Key of the tune; and in speaking of distances or degrees from the Key, we always reckon from the bottom.

So great is the variety in melody and harmony, that the natural scale is insufficient for all the purposes of musical composition; consequently the other letters of the scale may be, and are made use of as a Key Note.

When therefore any of the letters besides C, for a major, and A, for a minor, are employed for this purpose, it will, on examination appear, that the semitones would then be out of their regular and fixed order; and it will, consequently, be found necessary to have recourse to Flats and Sharps to restore them to their proper position. The necessity for doing this, is not always apparent at first view, to persons who only practice singing; but is perceived immediately by any one who performs on the most simple instrument.

Hoping thus to lead the attentive learner into a knowledge of the most essential points connected with practical vocal music, we will close our remarks by giving a few general observations.

DIATONIC SCALES.

<table>
<thead>
<tr>
<th>No. 1</th>
<th>No. 2</th>
</tr>
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<tbody>
<tr>
<td>MAJOR</td>
<td>MINOR</td>
</tr>
<tr>
<td>C</td>
<td>F</td>
</tr>
<tr>
<td>B</td>
<td>A</td>
</tr>
<tr>
<td>G</td>
<td>E</td>
</tr>
<tr>
<td>D</td>
<td>C</td>
</tr>
</tbody>
</table>

GENERAL OBSERVATIONS.

In the arrangement of the parts in the following work, the Air, or principal melody, has invariably been placed next above the Bass, and is always designed for the major voice; and the passages marked **f** for the minor voice. All the passages marked **s** are for the minor voice.

The people of the western country have ever been in error with regard to the arrangement of the voices to the parts; they invariably assign the Tenor voice to the female voices, or which is improperly denominated the Treble, by all the publishers of music in this country. The Treble voice properly belongs to the ladies' voices, but the difficulty is, that the names of the parts have been changed by those publishers.

The Air or principal melody is unquestionably the Treble, and should belong to the ladies. The Air being the principal part of music; so also is the Treble the principal, or superior to men's voices; consequently, the Air should be performed by the ladies' voices. The practice of putting the Treble voices on the Tenor, cannot be defended by any rule of analogy or reason.

Attention is particularly recommended to the terms **f** and **s**, which very frequently occur in this volume, and when properly observed, produce a beautiful and pleasing effect. The other directive terms will be found useful in denoting the style of the piece of music.

A person may have acquired a knowledge of all the various characters in psalmody, an ability also to sing his part in true time, and yet his performance be far from pleasing, if he be devoid of necessary embellishments: his bad expression and manner may conspire to render it disagreeable.

A few plain hints may tend to correct these practical errors.

It is by no means necessary to constitute a good singer, that he sing very loud; not only the tone of the voice, but the true sound of the note is destroyed by undue exertions of the voice.

In singing, the mouth should be opened freely, but if too wide it would entirely destroy a good tone. Imitate the elegant expression of the orator rather than the drill of the clown. Some persons pronounce their words tolerably well in soft singing, but exceedingly bad when they sing louder; which is owing, in the false idea, that they cannot make too much noise in the parts. Expression is one of the greatest beauties of music.

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CONCLUSIONS

THE INFLUENCE OF FACTIONALISM UPON MUSIC
IN THE PUBLIC SCHOOLS

"No one who has witnessed the astonishing sight-singing virtuosity exhibited by the shape note singers of the rural South today, trained with what is basically the 'Easy Instructor' method can possibly doubt the effectiveness of the device."15

Why then did not Lowell Mason and many of the other "Fathers of Music Education" make use of the shape notes as a pedagogical tool in their schools? If they had, perhaps the problem of sight-reading would not be confronting us today.

The development of public schools took place first in the urban North, where shape notes were rejected. The notes came to be regarded in the North as the musical notation of the country people who sang, for their own enjoyment, songs in a strange, almost primitive native idiom.

Choir directors and teachers busy with the more refined music of the European composers had little or no time for the "dunce notes" as they called them. However, the real dislike was not for the system of notation, but for the music associated with it. As a result, shaped notes did not make their way into the classroom.

GEORGE KYME'S EXPERIMENTAL STUDY
USING SHAPED NOTES

In an attempt to encourage the use of shape notes in the elementary schools, George Kyme undertook an experimental study to prove that "singing with shape notes will increase the accuracy of pitch and syllable naming and therefore will be reflected in the superiority of students using this method of learning to read music over those who learn by the use of the usual methods."

The experiment was conducted with three experimental groups of fifth graders and did not include the scores of students with instrumental music training for the main part of the
experiment. These students were included in the instructional groups, however, and a separate analysis of their learning was made.

The results indicated that the groups using shaped-notes (a seven-shape variety which was an outgrowth of the original four-shape system) were superior to the control groups in each of four paired situations. In addition, the instrumentalists who were given instruction in singing with the use of shape notes improved their reading ability almost as much proportionately as those who were not instrumentalists.

Another interesting observation made by Kyme is that "at the junior high school to which the three experimental groups were promoted, 63% of the students who were in the experimental group enrolled in seventh grade glee club--an elective, before-school course. The average percentage from other elementary schools entering the school is less than 20%." Kyme concludes his findings by saying, "In the light of this evidence, music educators may wish to reappraise the shape note system of teaching sight-singing, a system in use for over 150 years in the Southeastern United States." 16

IMPLICATIONS FOR MUSIC EDUCATION TODAY

Kyme's study points out the potential for shaped notes in the classroom. However, Kyme used Allen's seven-shape system, which is much more complex and involves more memorization and technical facility than did Little's four shapes. If the Southern singing schools read as well using the four-shape system as people such as Jackson, Britton, and Lowens have reported, then it seems quite likely that this system could provide an even better solution to the problem of music reading.

As a result of the findings reported in this article, one can merely speculate about the usefulness of shaped notes in today's schools, but hopefully, this article will serve as a catalyst to encourage additional research that could establish the validity of using Little's system of four shapes to teach sight reading.

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FOOTNOTES


4Ibid., p. 9.

5Ibid., pp. 6-7.


8Ibid., p. 90.


11Ibid.


14. W. B. Snyder and W. L. Chappell. The Western Lyre: A New Selection of Sacred Music, From the Best Authors; Including a Number of New and Original Tunes, with a Concise Introduction to the Art of Singing (Cincinnati: W. L. Chappell, 1831), pp. v-xi.


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**ABSTRACT**

A DESIGN FOR COMPREHENSIVE MUSICIANSHP IN THE SENIOR HIGH SCHOOL BAND PROGRAM

Roger W. Warner, Ed.D.
Washington University 1975

The dissertation is a descriptive account of a two year exemplary high school band performance program implemented by the author in the University City, Missouri public schools from 1970-1972.

The pilot program, funded in part by the Contemporary Music Project (CMP), represented an attempt to re-structure the organization, curriculum content, and teaching strategies of a previously traditional band performance program to serve as a vehicle for providing students having a wide range of performance proficiency abilities, a curriculum which would develop a deeper and broader understanding of music as well as a higher standard of excellence in performance. Providing impetus, in part, for the program were social and cultural changes occurring as a result of the integration of Blacks into a previously all White, predominately Jewish school system.

Modifications of the organizational structure included: creating a two-band format, moving the marching band out of the regular curriculum to function as an after-school sectional/ensemble program to include composition group activities and electronic synthesizer music instruction. The curriculum content was organized around a core of band literature repertoire representing many styles and periods for which lesson units were designed and implemented.

Large and small group rehearsals served as learning laboratories for integrating performance, analysis, and composition experiences. A conceptual base (the common elements approach) was used as an organizing thread in providing direction in musical experiences which were to synthesize musical understandings with improved performance practices.

In the second year, the project participated in the SECM Program (Symposium for the Evaluation of Comprehensive Musicianship) which assessed the effectiveness of CMP programs in changing musical behaviors of students in relation to the instructional goals established by the teacher.

Based on subjective teacher observation, student response, SECM evaluations and performance results, the author concludes that the integration of CMP curriculum planning and teaching strategies into the band performance program contributed significantly to the realization of many of the total musicianship goals. Further long term pilot projects, experimentally designed, are recommended for the purpose of testing whether or not the goals as well as the strategies are indeed more effective than more traditional approaches to band performance.

**ABSTRACT**

THE CULTURAL HERITAGE OF THE METROPOLITAN ST. LOUIS AREA AS REFLECTED IN THE SONGS AND FOLK SONGS OF ITS EUROPEAN ETHNIC GROUPS: A COLLECTION OF SONGS AND FOLK SONGS APPROPRIATE FOR USE IN ELEMENTARY AND JUNIOR HIGH SCHOOLS

Mary Clarice Newander, Ed.D.
Washington University 1975

There has been great interest in the ethnic heritage of St. Louis as demonstrated by the large crowds who attend the many ethnic festivals in the area. Music is an important part of these events.

Many of the songs of the ethnic groups are unavailable in printed sources, or if printed, are not accessible to the general public. This dissertation is a collection of the songs sung by the members of fifteen European ethnic groups in Metropolitan St. Louis, suitable for use in elementary and junior high schools by musically educated teachers.

In order to obtain the songs and background information needed for this collection, personal interviews were held with recognized representatives from each of fifteen ethnic groups.
The ethnic representatives gave the author rotated copies of the songs, invited the author to tape record performances of the music so that it could be transcribed for the dissertation, or they made recordings of the songs available to the author for transcription.

St. Louisians who speak the languages of the songs of the ethnic groups helped with translations and pronounced the foreign words as the author made a tape recording from which a phonetic pronunciation of the songs was developed.

The groups whose songs are included are Bulgarian, Croatian, Czech, French, German, Greek, Hungarian, Irish, Italian, Polish, Russian, Scottish, Serbian, Spanish and Swedish. Background information is given about each group including its history in the St. Louis area, as well as a discussion of ways in which it is currently maintaining and perpetuating its culture. An analysis of the musical elements and teaching aids precede the songs. For each song the melody and words in the original language, a phonetic transcription of the words beneath the original words, a translation, and a piano accompaniment or chord symbols are given.

A phonetic guide devised by the author and a map of ethnic neighborhoods in Metropolitan St. Louis are included in the appendices.

Musical selections from twelve of the ethnic groups are recorded on the cassette tape, Examples of Music Performed by Ethnic Groups in Metropolitan St. Louis which is available with the dissertation in Gaylord Library, Washington University.

ABSTRACT

A STUDY OF THE EFFECT OF HAND SIGNS IN THE DEVELOPMENT OF SIGHT SINGING SKILLS

Mollie Rose Autry, D.M.A.
The University of Texas at Austin, 1975
Faculty Member--Southwestern Missouri State University, Springfield

One of the aims of music education is the development of students who are musically independent singers. Several different sight singing systems are used for this purpose but finding increasing application in elementary music education is the use of hand signs with solfege for this purpose. The benefit of hand signs seems to be in their function as visual images of pitch, not only represented by the relative height of movement but also by the shapes of the hand. Since the use of hand signs, with syllables, does require a more complex response from a student, their effect on the ability to sight sing was investigated.

THE EXPERIMENT

The experiment was conducted in two separate treatment periods with fourteen experimental and control groups at the fifth grade and college levels. All groups participated in sight singing experiences for approximately ten minutes as a part of their regular music classes for a period of not less than ten nor more than fourteen weeks. During this time, the control groups used solfege while the experimental groups used solfege with hand signs.

Two types of tests were used in an attempt to determine any measurable differences between the experimental and control groups at the end of the treatment period. Individual sight singing tests were tape recorded and evaluated in the pretest-posttest sequence. In addition, Music Achievement Tests I and II were administered to attempt to measure aural development as a result of the two methods.

CONCLUSIONS

Several types of statistical analysis were possible. The correlation coefficients between pretests and posttests were high for all groups. The t-statistic indicated that five of the six fifth grade groups showed differences significant at the .05 level while only three of the adult groups indicated a significant change at the level of .05. The F statistic was calculated for each treatment group for sight singing tests. No significant differences at the .05 level were noted. Based on these data, the null hypothesis was accepted.
Although the study was primarily concerned with the skill of sight singing, MAT Tests I and II were administered to determine if aural development could be noted in the different treatment groups. The same statistical analysis was used on these data. The analysis of covariance revealed only four groups with significant differences. These were evenly divided between control and experimental and fifth grade and adult. The null hypothesis for differences in aural skill development as a result of the two treatments was accepted.

ABSTRACT

A STUDY OF THE CURRICULUM MATERIALS USED IN MUSIC CLASSES IN THE PRIMARY AND SECONDARY SCHOOLS IN TAIWAN FROM 1950 TO 1973

Stephen Yik, Ed.D.
Washington University 1975

This paper is a survey of the Taiwan grade school music instructional materials of from 1950 to 1973. It describes the publishing conditions, contents, changes and trends, and how the materials were used. Data concerning the actual use of the instructional materials in schools were gathered through planned interviews.

The study shows that the musical instructional materials as well as the practices in music education of Taiwan began with what was in use on Mainland China up to 1949 and developed in the same general direction. Music education on Mainland China had adopted the Western countries' materials and practices from the beginning of the twentieth century; up to the 1970s, except in didactic matters, the music curriculum materials of Taiwan still incline to the Western style. On the other hand, the influence of the most recent music pedagogies and contemporary music of the Western countries is not seen among the school music texts and not apparent among the supplementary curriculum materials.

There have been many publishers involved in preparing music materials for teacher or student use. There were almost as many text book series as music teacher's aids published. The supply of music text books had been in a rather confused state until a unified text series was prepared by a government commission, the National Editing and Translating Commission, in 1968.

The contents of the curriculum are analyzed according to reading skill development, vocal skill development, musical instrument studies, creative activities, historical studies and appreciation programs, and songs for singing. Of these areas of study, the musical instrument studies, creative activities and the appreciation programs are relatively recent additions to the curriculum. The unified text series of 1968 has improved the content of study in all the six of these areas.

The author evaluated the materials and made recommendations for improvements, basing his arguments on the existing educational environments and practical conditions.

ABSTRACT

A STUDY OF SELECTED TWENTIETH-CENTURY COMPOSITIONS FOR HETEROGENEOUS BRASS ENSEMBLE AND ORGAN BY UNITED STATES COMPOSERS

J. Jeffrey Keith Price, D.M.A.
University of Missouri-Kansas City, 1976

The purpose of this study is to supply information to aid in the selection of performance material for brass and organ, and contribute to an understanding of the music to promote more intelligent and musical performance. It is hoped, also, that access to this body of literature will be facilitated by the presentation in the appendices of publication information, composers' addresses and other relevant data.

In order to establish the development of the use of brass instruments with organ, an historical survey of music for brass and organ has been included as Chapter I. This chapter includes discussion of works written for solo brass instruments with organ as well as compositions for brass ensemble and organ. The sources of
information were peripheral to the topic and included historical studies of brass, organ, and church music. No extensive treatments of music for brass and organ have been found. It is hoped that the material in this chapter will serve to indicate the breadth of the literature for brass and organ to stimulate further research.

Chapter II consists of analyses of thirty-one selected twentieth-century works for heterogeneous brass ensemble and organ by United States composers. An extensive search was conducted to identify titles of works in this category. The search utilized available books, periodicals, catalogs, and unpublished materials, as well as a great deal of correspondence with authorities in the areas of brass instruments and organ and with composers. A detailed procedure was employed to select a representative group of works for analysis.

This study was limited to works composed in the twentieth century by United States citizens. This was to limit the number of compositions to be considered and to establish a body of literature which was relatively accessible. To be included, the required brass ensemble must have consisted of parts for two or more different brass instruments. The brass instruments in the ensemble were to include only lip-reed aerophones. Several works in this category contain percussion parts and have been included in the study. Works which include parts for other than brass, organ, and percussion have been considered beyond the scope of this study, however.

To make the material as useful as possible to both the reader and the careful reader, each entry is presented in an outline form. Information given for each work includes composer, title, date of composition (if known), place, publisher, date of publication, and the exact instrumentation (including keys of trumpets and horns). Also presented for each work are the range utilized for each brass instrument, percussion requirements, any information available concerning the purpose of the work, the number and character of movements, a general discussion of the musical style, and an examination of the technical requirements. In the interest of consistency and to convey each composer's intentions as accurately as possible, all musical examples have been photocopied.

Chapter III summarizes the findings of Chapter II and presents the author's conclusions. It is observed that a relatively conservative compositional style prevails in the available brass and organ works, and the brass writing in most works is conservative in regard to technical demands. A few of the compositions analyzed are recommended by the author as being particularly outstanding, and it is suggested that performers and teachers could enrich the current recital repertoire for both brass instruments and organs by more use of brass and organ works. An invitation is also issued to composers to add significant works of a more innovative nature to the literature.

This abstract of about 600 words is approved as to form and content.

ABSTRACT

A SELECTED AND ANNOTATED BIBLIOGRAPHY OF ORIGINAL WORKS FOR TROMBONE TRIO

Donald Austin Rummel, D.M.A.
University of Missouri-Kansas City 1976

The purpose of this study was to examine the extent of original literature for trombone trio and to provide an annotated bibliography of compositions appropriate for inclusion on formal recital programs written and/or published before January 1, 1975. Only available pieces, manuscripts or in print, are included in the bibliography. As well, pieces in jazz or popular idioms, contest or novelty pieces, pieces which designate trombones only optionally, transcriptions, and pieces with keyboard or other instrumental accompaniment are excluded.

An extensive search for trombone trio literature was undertaken. Fifty-three original trios by forty-six composers from fourteen countries were located. Of these, the great majority were composed in the present century. Only four or perhaps five pieces date from the last century,
and none were composed in the eighteenth or earlier centuries. Thirty-eight works are published; three of these are out-of-print. Each score was purchased or received gratis, rehearsed, and tape recorded for further study. The resultant bibliographic entry for each piece includes the composer's name, dates, and nationality; the title and year of composition; the format (i.e., score and/or parts); the performance time; the facts of publication or other source; and the movement titles and/or tempo indications. A brief text discusses general background information, the editorial procedures, legibility, discrepancies, musical factors, and performance considerations. When available, critical reviews and the composer's analyses, comments, and observations are also included.

The study confirms that a corpus of recent chamber music for trombone trio does exist. Most of the pieces do not venture beyond typical nineteenth-century harmonic, melodic, and rhythmic practices; yet present formidable difficulties for the advanced performer. Although, in this author's opinion, several works exhibit outstanding musical worth, it is not yet possible to determine the impact of this literature on the status of the trombone trio.

This abstract of 300 words is approved as to form and content.

ABSTRACT

LEITH STEVENS: A CRITICAL ANALYSIS OF HIS WORKS

James C. Hamilton, D.M.A.
University of Missouri-Kansas City 1976

Leith Stevens (1909-1970) was an American composer whose primary pursuit was the composing of background music for radio, television, and motion pictures. It is the purpose of this dissertation to analyze and to evaluate his work.

The first analysis is of nine contrasting sections of nine different film scores. The purpose of this study is to isolate different stylistic characteristics and to draw some general conclusions as to Steven's compositional methods, traits, and preferences. Next follows an analysis of an entire motion picture score with special consideration given to the use of music to complement, supplement, and duplicate the screen action. Finally, there is a study of the Piano Concerto to discover if Steven's concerted music is of the same quality as his film scores.

The stylistic analyses show Stevens to have been a versatile composer with the ability to write in various styles. He was able to employ a style that was appropriate to the film. He even contributed some new styles to the film music industry when in 1940, in the film Destination Moon, he was one of the first to experiment with the now-popular serial effects of the science-fiction film and in 1954, in the film Private Hell 36, he was responsible for creating the first total jazz background score.

The analysis of an entire motion picture score with emphasis on the relationship of the music to the psychological implications of the plot shows that Stevens had an ability to grasp even the most subtle innuendo and to represent it in the score. He was able to transform themes and to weave them into complex musical fabrics that enhanced the meaning and effect of the film story.

Unlike his film music output, which was prodigious, his concerted music production was very small. Evidence uncovered in an analysis of his Concerto for Piano suggests that Stevens had not here mastered the large-scale form.

Also included in this paper is a brief biographical chapter which traces Stevens' life from Kansas City, where he attended the Horner Institute of Music and studied piano with John Thompson, to New York, where he attended the Juilliard School of Music, studied piano with Josef and Rosina Lhevinne and composition with Joseph Schillinger, and to Hollywood where he became one of the most successful film score composers in the world, culminating in his appointment to the position of Music Supervisor of Paramount Television.

This abstract of about 400 words is approved as to form and content.
ABSTRACT

TEACHING AURAL SKILLS WITHOUT VISUAL AIDS: A STUDY USING SIGHTED AND NON-SIGHTED CHILDREN

Shelley M. Marshall, M.M.E.
University of Missouri-Kansas City 1976

The problem of this study was to determine if musical concepts can be learned without the use of visual aids. Special materials to teach aural discrimination without visual cues were developed using the Audio-Visual Identification Instruction (AVII) model for group instruction. The purpose of this study was to compare the achievement of blind and partially sighted children taught without visual cues and sighted children taught without visual cues, each using the AVII model materials, with the achievement of sighted children taught with traditional materials or four musical pitch discrimination tasks. The tasks were taught in the following order: discrimination of high pitch, discrimination of low pitch, discrimination of ascending pitches, and discrimination of descending pitches. A quasi-experimental post-test only control group research design was used for the investigation. A criterion instrument was constructed to measure achievement. The responses by subjects on the criterion measure on four musical pitch tasks constituted the primary data. Visual acuity of the subjects, the type of instruction, and the type of musical tasks were the secondary data. The test of significance was a two-tailed t test. The blind group scored as well or better than the sighted children on the high pitch task. They scored the same or significantly less than the sighted groups on the recognition of low pitch and descending pitches. On discrimination of descending pitches they scored better than the sighted experimental group, and not significantly different from the control group. It appears that in the first task each group was equally unfamiliar with the testing procedure. The sighted groups were also not used to responding to aural stimuli; the sighted children may have scored better because they had developed the ability to focus on aural stimuli.

The control group scored increasingly higher mean over the series of tests, exhibiting better understanding of the testing procedure as well as the musical tasks. The sighted experimental group scores show the least amount of change.

Subject to the limitations and circumstances of this study, it was concluded that young children, both sighted and non-sighted, can benefit from training in aural perception. It cannot be concluded with confidence that sighted children are distracted by visual aids for aural discrimination tasks. The blind and partially sighted children in this study did exhibit significant achievement in learning aural skills without visual prompts.

ABSTRACT

THE EFFECT OF MODEL INSTRUCTION ON TEACHING THE MUSICAL CONCEPT "PHRASE" TO SECOND YEAR BAND STUDENTS

Judith Kay Cook, M.M.E.
University of Missouri-Kansas City 1976

The problem of the study was to investigate the functional nature of AVII model instruction for teaching basic musical knowledge to second year band students. Aural-visual identification instruction (AVII) model materials and traditional performance-centered instructional techniques were used in actual classroom situations.

The purpose of the study was to compare the achievement of second year band students on the musical learning task "phrase," when aural-visual identification instruction (AVII) model materials are used by the teacher, with that of second year band students on the learning task "phrase," when traditional performance-centered instructional techniques are used. The AVII model provides for stated behavioral objectives, naming and identification of specific sound phenomenon, positive and negative examples, immediate knowledge of results, feedback and positive reinforcement, as well as a criterion-referenced test for measurement of achievement.
over an arbitrarily determined period of time. The model was designed for group instruction, which is the common mode of instruction in public school instrumental classes. The AVII model provides for practice in associating verbal cues with musical stimuli.

The research was a separate sample pretest-posttest experimental-control equivalent materials quasi-experimental design. Type of instruction and grade level were independent variables. Achievement on one musical learning task was sampled in two grade levels of second year band students.

Two instruments were used for measurement: the Preference Test S, Musical Sensitivity; Part I, Phrasing, of the Gordon Musical Aptitude Profile (MAP); and a criterion-referenced achievement measure, which served as a pretest-posttest instrument.

The sample of four second year bands was selected from four schools in the Kansas City metropolitan area and surrounding areas. All four schools have predominantly white populations. One school was located in a rural farming community. Two second year bands at eighth grade level and two second year bands at sixth grade level were instructed in the musical concept "phrase." Complete sets of data were obtained from 149 subjects.

Subtest I; Preference Test S of the MAP was administered. Subjects were pretested, instructed by the band directors with either AVII model materials or traditional performance methods, and posttested. Instruction was limited to five consecutive class sessions. The data were computer-processed for statistical significance by one-way analysis of variance. A posteriori comparisons were analyzed by a t-test of difference between means.

A significant gain in achievement was demonstrated by students instructed with AVII model materials. Only eighth grade level students demonstrated a significant gain in achievement when traditional performance methods were used for instruction. No significant gain was made by sixth grade level students instructed with traditional performance methods.

The comparisons of group means showed mean achievement gain by eighth grade students to be significantly greater than that of sixth grade students when receiving the same type of instruction.

Within the limitations and circumstances of the investigation, the AVII model appears to have been effective for teaching "phrase" to second year band students at the sixth and eighth grade levels. The findings must be interpreted with caution as data were obtained for only one single task. Further investigation with other tasks seems to be warranted.
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