DEVELOPING SPECIALIZED PROGRAMS FOR SINGING IN THE ELEMENTARY SCHOOL. INTERIM REPORT.

BY- GOULD, A. OREN
WESTERN ILLINOIS UNIV., MACOMB

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THE DEVELOPMENT OF CLASSROOM TECHNIQUES AND MATERIALS TO HELP CHILDREN FIND AND LEARN TO USE THEIR SINGING VOICES WAS REPORTED. THE PROJECT WAS BASED ON THE BELIEF THAT FINDING AND USING HIS SINGING VOICE IS THE FIRST STEP A CHILD TAKES TOWARD SUCCESSFUL MUSICAL LEARNING IN THE ELEMENTARY SCHOOL.

THE STUDY HAD THREE PHASES. PHASE 1 CONSISTED OF AN INTERNATIONAL SURVEY OF CHILDREN'S SINGING PROBLEMS, CONSULTATIONS WITH MUSIC EDUCATORS AND CLASSROOM TEACHERS, AND OBSERVATIONS OF CLASSROOM SINGING ACTIVITIES IN A VARIETY OF ELEMENTARY MUSIC CLASSROOMS. PHASE 2, IN PROGRESS AT THE TIME OF THIS REPORT, WAS DEVOTED TO PILOT STUDIES AND CASE STUDIES IN THE WESTERN ILLINOIS UNIVERSITY CAMPUS SCHOOL AND SEVERAL PUBLIC SCHOOLS. STUDY PROGRESS ON THE FOLLOWING TOPICS WAS REPORTED—(1) THE RELATIONSHIP OF CONTROL OF THE SPEAKING VOICE TO CONTROL OF THE SINGING VOICE, (2) THE IMPORTANCE OF PITCH ACUITY AND TONAL MEMORY IN LEARNING TO SING, AND (3) THE EFFECTIVENESS OF REMEDIAL TECHNIQUES AND MATERIALS IN HELPING CHILDREN PARTICIPATE SUCCESSFULLY IN SINGING ACTIVITIES. PLANS FOR A PHASE 3 EFFORT WERE DESCRIBED, CONSISTING OF CLASSROOM EXPERIMENTS IN PUBLIC SCHOOLS AND THE DEVELOPMENT OF A TEACHER'S HANDBOOK FOR ADAPTING THE FINDINGS OF THE STUDY TO CLASSROOM MUSIC ACTIVITIES. (GC)
DEVELOPING SPECIALIZED PROGRAMS FOR SINGING IN THE ELEMENTARY SCHOOL

An Interim Report

A. OREN GOULD

WESTERN ILLINOIS UNIVERSITY  Macomb, Illinois 61455
DEVELOPING SPECIALIZED PROGRAMS FOR SINGING IN THE ELEMENTARY SCHOOL

Cooperative Research Project No. 3074 (2541)

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A. OREN GOULD
WESTERN ILLINOIS UNIVERSITY
Macomb, Illinois

FOREWORD

There is growing concern for the development of more vital and challenging musical experiences for elementary school children among music educators and among educators generally. Along with this concern is an increasingly strong conviction that more effective ways must be found to reach all children with the art of music. To the extent of their interests and capabilities the importance of the art of music in their adult lives should be "determined by choice rather than by chance".¹ The writer herein submits an interim report on the initial study of a series of investigations to be devoted to the search for more effective ways of awakening and developing the potential for successful musical experiences in elementary school children. This study focuses on the problems encountered in helping children find and learn to use their singing voices.

The project has been made possible by a grant from the United States Office of Education. Special recognition is due Western Illinois University and President Arthur L. Knoblauch for providing both encouragement and assistance in implementing the study; to the Western Illinois University Research Council and Chairman Richard D. Gibb for assistance in initiating the study; and to Herman R. Koester, Treasurer of the Western Illinois University Research Council who serves as financial officer for the project.

The writer wishes to express his particular thanks at the time of this interim report to the faculty and elementary school children of the Western Illinois University Campus School, to Principal H. Waldo Horrabin, and to Dr. Donald Hahn, Curriculum Coordinator. Their interest and enthusiasm are largely responsible for the continued progress toward successful conclusion of the project.

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INTRODUCTION

Some children find their singing voices at an early age and are able to participate with maximum effectiveness in elementary music experiences from the first days of kindergarten on. Other children for various reasons do not find their singing voices until later on — some much later, and some never — in their school experiences with music. In the past this has been a major problem for many teachers of music in the elementary grades. Some, perhaps most, have reacted more negatively than positively to the problem. Such descriptive words applied to these children as non-singer, out of tune singer, monotone, uncertain singer and many other terms suggest the pessimistic concern of adults for children who have not yet found their singing voices. Some classroom teachers and music specialists seem to believe that the plight of these children is hopeless but at the same time seem impelled by conscience to subject them to countless embarrassing vocal drills in the faint hope of “getting the voice up” or “getting the out of tune singer in tune”.

A very unfortunate situation has existed for years for school children who have experienced this delay in finding their singing voices. The impact of lack of successful participation in the singing activities has been intensified by their being singled out by the teacher for special drill. Added to this has been the impact of the negative attitudes of both peers and teachers. Often even parents have been guilty of starting the “Johnny can’t carry a tune in a basket” myth before the child has reached school age. The net result of all of this has been the development of inhibitions on the part of such children toward singing. These inhibitions soon develop into psychological inhibitions toward music in general, and these all too often last a lifetime.

New content and new media have been developed for the elementary music curriculum at a very rapid rate during the last five years thanks mainly to music education research. The principal motivating force behind research efforts in elementary music has been the desire to develop programs which will effectively reach all children with the art of music at an early age and maintain interest in and involvement with music into adult life. A study of children who experience delay in finding their singing voices seems both timely and necessary to the fulfillment of these objectives. Effective and rewarding participating in the singing activities of the music program in the elementary grades is an essential element of successful and satisfying musical learning. This writer believes that it is the first and most important step the child takes toward favorable experiences with music, and that after such experiences in the primary grades it is possible to maintain both positive attitudes and successful experiences with music throughout life.

Dedicated to this belief, this project has as its purpose the examination of the singing problems of children who are experiencing delay in finding their singing voices. As the initial study of a series
of studies of elementary children's musical experiences, its focus is on the problems of children who do not have physical or emotional handicaps. The musical problems of handicapped children will be examined in a later project.

The study, begun in July, 1965, consists of three phases of one year's duration each. The first phase of the study, now completed, was a thorough examination of the singing problems of children as they exist currently in elementary music classes. This phase consisted of an international survey of opinions of music specialists and classroom teachers of the incidence and nature of children's singing problems. It included opinions concerning successful classroom and individual remedial techniques. In addition, the project staff visited numerous classrooms and conferred with teachers and supervisors in a variety of school situations.

The second phase of the study, now in progress is devoted to pilot studies in the Western Illinois University Campus School and to case studies of individual children by cooperating researchers in other schools who have demonstrated interest and competency in the problem areas of the study. The third phase of the study, which is scheduled to begin September 1, 1967, will be devoted to classroom experiments to be conducted in schools in various parts of the United States. These schools will be selected so that a variety of classroom situations reflecting different ethnic, economic and cultural influences are represented.

The following sections of this report will deal with a summary of the research activities engaged in thus far, a description of future activities now being planned, and a brief analysis of the preliminary findings of the study at its approximate mid-point - January 1, 1967.

Children work together with speech and song patterns used in their daily classroom routines.
PHASE 1
EXAMINATION OF CURRENT PROBLEMS

The examination of the singing problems of children as they currently exist in elementary schools was made employing the following procedures: 1) Survey of opinions of music specialists and classroom teachers using written replies to a questionnaire. 2) Consultations with instructors of college methods courses in elementary music, elementary music education experts, special music teachers and classroom teachers of music. 3) Observations of children's singing activities in group sessions and in individual coaching sessions by the project staff.

Survey. The survey of incidence, acuteness, nature, probable causes and successful remedial techniques for children's singing problems, undertaken on a limited regional scale before federal support for the project was received, was expanded to international proportions during the first year of the study. From the 578 replies received from music specialists and classroom teachers in all fifty states and from nine countries of Europe, Australia, South America and Canada, a mass of data reflecting many different points of view but a high degree of agreement was received.

A brief summary of the areas where a certain amount of consensus occurred is as follows:

1) Most of the teachers responding to the questionnaire believe that, excluding organic difficulties, all children can be helped to some extent to participate in singing activities with enjoyment and success.

2) Inability to sing on a prescribed pitch level with accuracy is not always a manifestation of low aptitude, or of the ability to perceive pitch. It may be, rather, kinesthetic in nature in that the child has simply not found out "what it feels like" to use his voice in unison with others.

3) The most common vocal difficulty is the low speaking voice, where the child finds it is uncomfortable or requires extraordinary effort to sing on the pitch level prescribed for the class.

4) Psychological inhibitions toward singing and toward music generally, which develop very quickly when the child's initial efforts to sing are unsuccessful, can in practically all cases be traced to attitudes and remarks of adults - teachers and parents.

5) Most respondents agreed that, if some children are to be helped to find their singing voices in group singing activities, remedial measures must be employed during kindergarten through grade three. By grade four a child's inhibitions toward singing may be so great that he can only be helped in private coaching sessions.

It is interesting to note from questionnaire replies that although the respondents felt that the percentage of incidence of non-singing was being lowered considerably in their own school situations, in no case was a complete elimination of non-singing children by the
sixth grade reported. The average percentage of incidence of non-singing by grades as compiled from the survey is as follows:

- Kindergarten: no consensus
- First grade: 50% non-singers
- Second grade: 20% non-singers
- Third grade: 10% non-singers
- Fourth grade: 10-15% non-singers
- Fifth grade: 5-10% non-singers
- Sixth grade: 5% non-singers

Several teachers reported some regression to non-singing in the fourth grade by children who had shown a high degree of improvement in singing ability by the third grade. (Further investigation is being undertaken to determine the extent to which this happens and possible reasons for it.)

All respondents to the questionnaire suggested remedial measures which they had found successful to some degree. Some of these have proved useful in the pilot studies of Phase two of the project.

Consultations and Observations. Consultations with music education experts, music consultants and classroom teachers who have expressed interest or claimed success in working with problem singers were combined with observations of children's classroom singing activities. Visits have included schools in the following cities: Clayton, Missouri; Cleveland, Ohio; New York, N.Y.; San Diego, Fullerton and Beverly Hills, California; Quincy, Canton, Princeton and Macomb, Illinois. Problems and solutions were observed in action and case histories of children of varied ethnic, economic and cultural backgrounds were obtained first hand from the practicing teachers and experts consulted. The data from these activities have been valuable in developing the activities of Phase two of the project.

Hearing acuity and ability to distinguish pitches of various frequencies are checked with the audiometer.
PHASE 2
PILOT STUDIES AND CASE STUDIES

Phase two of the study was begun on September 1, 1966. It consists of two major types of research activities: 1) Pilot studies conducted in the elementary classrooms of the Western Illinois University Campus School. 2) Case studies of individual children having singing problems.

Pilot Studies. Children in grades one, two, and three of the Western Illinois University Campus School have been divided into experimental and control groups at each grade level. Experimental and control groups contain equal numbers of boys and girls matched according to achievement and chronological age. At each grade level experimental and control groups are equalized in terms of singing ability using scores obtained by each child on the Gould Speech and Song Response Test\(^1\) and in terms of musical aptitude scores obtained on the primary grades version of the Gordon Aptitude Profile.\(^2\)

Techniques, materials and activities designed to help children find and use their singing voices constitute the experimental sequences used at each grade level. In the experimental groups these are interspersed with the musical experiences of the regular classroom music program. The control groups experience the identical classroom music program except for the experimental sequences. All groups meet for twenty minutes daily and are taught by the research staff.

Effects of the experimental sequences will be measured by comparing pre-test and post-test scores obtained by children in the experimental and control groups on the Gould Speech and Song Response Test. Each child in each group made a tape recording of speech and song patterns at the beginning of the year. In April each child will make a second recording. Progress of problem singers will be judged by a panel of experts selected for the project. Voice patterns of some children are to be examined with an oscilloscope as a part of the observation schedule of the project staff. The observation schedule provides for day by day charting of the progress of all children in the experimental and control groups.

Case Studies. To supplement the pilot studies which are being conducted in the primary classrooms of the University Campus School, case studies are being conducted by cooperating teachers and researchers using subjects chosen from classrooms available to them in their local institutions. Case study subjects are individuals

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\(^1\) A. Oren Gould, "Gould Speech and Song Response Test," (Macomb, Illinois: Western Illinois University, 1965) unpublished test. This tape recorded test was developed especially for the project.

Bodily movements and hand motions reinforce concepts of pitch intervals.

whose singing problems give promise of contributing valuable data for the project. Cooperating researchers who now have case studies in progress are:

Mrs. Irene Korte, elementary music consultant for the Alanton Elementary Schools at Virginia Beach, Va., has twelve case studies of third grade children in progress. With half of the subjects chosen she is using remedial techniques which she
Miss Rita Fuszek, instructor of elementary music methods at California State College, Fullerton, Cal., is developing ten case studies of college students enrolled in the non-major music courses for elementary classroom teachers. Her investigations are focusing on psychological inhibitions toward singing. Each of her case study subjects will have before and after tapes to measure singing improvement occurring as inhibitions are broken down.

Dr. John Sheldon, Professor of Music Education, at San Diego State College, is experimenting with the effect of a sequential pattern of listening experiences on aural acuity and tonal memory. His case study activities include before and after tape recordings which will be used to examine evidence of the relationships between pitch discrimination, tonal memory and the ability to sing.

Additional case studies to begin in January 1967 are planned. In the public elementary schools of Quincy, Illinois case studies are to be undertaken by music consultants Marjorie Ahlstrand, Marilyn Emery, and James S. McKeazie, with Dale Kimpton, supervisor. Supervisor of vocal music Dixie Holden and directing supervisor of

Before and after tape recordings measure each child's progress in finding and using his singing voice.
music, Robert H. Rimer expect to develop a group of case studies in the upper elementary grades of the Cleveland, Ohio Public Schools. In the Princeton, Illinois Elementary Schools case studies are planned by music specialist Peggy La Pove and elementary classroom teacher Elizabeth Whitten Smith.

Experimental Sequences. Experimental sequences used in the Campus School pilot studies have been developed on the assumption that two basic principles are involved in helping a non-singing child find his singing voice: 1) He must learn to hear, judge and control the vocal sounds he makes; 2) He must experience the unison of his voice with sounds he hears from another voice or instrument. Emphasis is on determining the effectiveness of techniques usable in group activities in the primary grades. Actual remedial activities used may be classified as follows:

1. Speech to song activities employing speech patterns used in the child’s daily routine which involve changes in pitch levels. These are first used without definite pitches and then later associated with appropriate melodic intervals. Included in later stages are activities using poetry and verses of songs of the regular classroom music program.

2. Song patterns in play songs. These are repeated tone patterns which occur in songs involving a game or play situation. Included are echo songs, songs about animals, roll call songs and the like, and the use of humming and neutral syllables.
3. Bodily movements which dramatize the direction of the tone patterns sung. These include singing games and folk dances. Hand motions, movements of the entire body and drawing the shape of melody patterns on the chalkboard are also used with activities 1 and 2.

4. Mechanical devices. At present the tone bells and the piano keyboard are being used to play melody patterns being sung by the children in activities 1, 2, and 3. It is planned to experiment with recorders and song flutes in similar fashion in one or more groups in the near future.

Keyboard instruments and resonator bells combine visual and auditory concepts of melody.

PHASE 3
EXPERIMENTS IN PUBLIC SCHOOL CLASSROOMS

In the first two phases of the study the project staff is primarily concerned with identifying and clarifying unanswered questions relating to the problem of helping children find their singing voices. In addition it is hoped that in the second phase the pilot studies and case studies will give sufficient indication as to what instructional techniques and materials are effective to justify their use in the more formal classroom experiments which constitute the third phase.
The third phase of the study will be devoted to classroom experiments in the public schools. Control and experimental classrooms will be selected on a nation-wide basis to reflect as many environmental factors which might influence the process of learning to sing as the resources of the project permit. Some of the environmental factors to be considered in selecting participating classrooms are: 1) geographic — urban and rural, north and south (U.S.), east and west; 2) size of classes; 3) economic, social, and cultural backgrounds of the children; 4) teaching and learning situations — music taught every day and less frequently, music taught by the specialist alone, the classroom teacher alone and by a combination of the two.

Research techniques to be used in the experiments in the public school classrooms will include pre-test and post-test procedures, before and after tape recordings, matching in terms of age, achievement and singing ability of children assigned to experimental and control classrooms. The content and nature of the experimental sequences to be used will be determined when the results of the pilot studies and case studies of Phase 2 which are in operation at the time of this report have been evaluated. The data obtained from Phase 2 will also determine whether more than one experimental sequence is needed.

Learning to use the singing voice is a group activity.
Preliminary Findings of the Study

At the time of writing this report the project has reached the halfway point of its three year duration. It is also the halfway point of Phase 2. From the opinion survey, from consultations with experts, from observations of teachers working with children in singing activities, and from pilot studies and case studies thus far a number of interesting questions and problems have been defined. It is expected that these will be of great value in determining the exact structure and content of the classroom experiments of Phase 3.

Among the questions which have emerged and are in the process of clarification in Phase 2 at this writing are:

1. The entire question as to the improvability of pitch discrimination and tonal memory. Are these so-called aspects of musical aptitude really musical skills which can be developed?

2. To what extent is the ability to learn to sing dependent on so-called musical aptitude generally and particularly on pitch discrimination and tonal memory? To what extent is the development of singing skills kinesthetic in nature, that is, a matter of learning "how it feels" to sing?

3. What is the relationship of speaking skills to singing skills? Can the development of more control of the voice in speaking lead to control of the voice in singing?

4. Questions concerning the value of the use of specific remedial techniques in helping children find their singing voices.
   a. What about the traditional devices such as imitations of animals, fire sirens, etc.? Are they of no value? Or do they develop desired concepts and skills of voice production if used in song or game song context.
   b. To what extent if any do combined visual and auditory concepts of pitch levels help in pitch discrimination and tonal memory? How important are associations with the keyboard, tone bells, and melody instruments?
   c. Of what value are such vocal devices as humming, using neutral syllables, lowering the head to gain the feeling of the head voice and the like?
   d. Of what value are bodily movements, hand motions, drawing the shape of melodies, and singing games and folk dances in helping the child develop concepts of tonal direction and the ability to control the singing voice on varying pitch levels?

As the project unfolds it becomes increasingly clear that the study of individual children by daily observation may provide as much data as the statistical data obtained from the group experiments. Indications are that answers to the questions listed above are forthcoming, and that the effectiveness of group techniques and materials for helping children of the primary grades find their singing voices can be documented.
The problems of children who have reached grades 4, 5 and 6 without finding their singing voices require much more investigation than has been attempted thus far. From this point on in the study more attention will be given to the problems of the upper grade children. Among the interesting questions to be considered will be:

1. Can children in the upper grades be helped with group activities? Can activities be developed which will be acceptable to these children in group situations in terms of their maturity levels.

2. Are children actually growing up earlier than they did twenty-five years ago? If so, what are the special problems of boys in elementary music classes whose voices are beginning to change (a few as early as grade 4 and many by grade 6)?

**FINAL REPORT**

The final report on the project is to be completed by June 30, 1968. At that time a handbook designed to aid elementary music teachers in adapting the findings of the study to their classroom music activities will be made available to all individuals involved in teaching elementary classroom music.

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PROJECT STAFF

DIRECTOR:
A. Oren Gould, Ed.D.  
Associate Professor of Music Education  
Western Illinois University

RESEARCH ASSISTANT:
Judith L. Crites  
Faculty Assistant in Music  
Western Illinois University  
Campus School

RESEARCH SECRETARY:
Dorothea E. Winter  
Western Illinois University  
Music Research Office  
Campus School, Room 135

FINANCIAL OFFICER:
Herman R. Koester  
Treasurer, Research Council  
Western Illinois University

PROJECT OFFICER:
Harold Arberg, Ed.D.  
United States Office of Education  
Arts and Humanities Division

PROJECT CONSULTANTS:
Wayne Wiggins, Ed.D.  
Western Illinois University  
Macomb, Illinois

Dorothea Gishler, Ed.D.  
Western Illinois University  
Macomb, Illinois

Charles Leonhard, Ed.D.  
University of Illinois  
Urbana, Illinois

Hazel B. Morgan, Ph.D.  
Claremont Graduate School  
Claremont, California

John Sheldon, Ph.D.  
San Diego State College  
San Diego, California

Westervelt Romaine, Ed.D.  
Fairfax Public Schools  
Fairfax, Virginia