Music Supported Literacy

By Kathleen Broer
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Abstract:

I taught music in three schools where 10-40% of the student population spoke another language at home. I ran an all-select choir for Kindergarten, Primary, Junior and Intermediate students once per week. I was interested in answering the following questions: What impact might weekly rehearsals of an all-select choir have on language learning? How do specific choral activities help to improve auditory skills necessary for literacy?

Literature Review

Escalda, Júlia; Lemos, Stela Maris Aguiar and Franca, Cecília Cavalieri’s (2011) work on Auditory processing and phonological awareness skills of five-year-old children with and without musical experience examined auditory processing and phonological awareness of groups of 5-year-old children with and without musical experience. Participants were 56 5-year-old subjects of both genders, 26 in the Study Group, consisting of children with musical experience, and 30 in the Control Group, consisting of children without musical experience. All participants were assessed with the Simplified Auditory Processing Assessment and Phonological Awareness Test and the data was statistically analyzed.

There was a statistically significant difference between the results of the sequential memory test for verbal and non-verbal sounds with four stimuli, phonological awareness tasks of rhyme recognition, phonemic synthesis and phonemic deletion. Analysis of multiple binary logistic regression showed that, with exception of the sequential verbal memory with four syllables, the observed difference in subjects' performance was associated with their musical experience. Musical experience improves auditory and meta-linguistic abilities of 5-year-old children.

Neuerburg’s (2012) research on the impact of vowels on pitch finding and intonation in the movable-do solmization system examines how individual vowels contain perceptual qualities and intonational tendencies, due to their physiological articulation and acoustic properties. This study relates vowel characteristics with the solfège syllables used in the movable-do solmization system, and explores potential implications for intonation awareness.

Patel and Daniele’s (2003) study of the Impact of Music on Language Learning documents the impact of specific linguistic experience on hearing musical rhythm. She has pioneered the search for commonalities between speech and music. She and Frank Russo co-lead a team of psycho-linguists and linguists in systematic comparisons between the development of singing and speaking, across age and culture, so as to define the commonalities and boundaries between song and speech.
Their findings conclude that the incantatory nature of rhythm and rhyme--and this seems true of singing and poetry in all cultures--allows children to experience language in a “whole” way. Language teachers value the practice ESL students engage in when they are singing songs. This activity mimics the fluency they will eventually experience, before they have acquired all the elements of the new language.

Carmen Fonseca’s (2004) research on how music affects language acquisition considers the value of relating music and language in the EFL classroom. From an ontological point of view, sounds are the roots of both music and speech. Our ‘melodic approach’ is based on the evidence that musicality of speech has an effect not only on the pronunciation skills of English Language students but also on their entire language acquisition process. Fonseca’s research attempts to uncover the “flow” or “patterning” quality that singing has on the language student.

Cook’s (2000) research on the role on rhythm and repetition in children’s verse in L1 acquisition examines what is happening in the mind of the pre-linguistic child when they listen to rhymes or verse that are pervasive in their environment. He says that children are innately predisposed to respond to rhythm, rhyme, and repetition. He then pursues the idea that traditional children’s rhymes and stories play an important part in language development. He suggests that this love of rhythm, rhyme, and language play continues into adulthood and has a role in shaping linguistic and social environments.

**Sample and Context**

I ran an all-select choir for Kindergarten students, Primary students, Junior students and Intermediate students once per week, within the teaching day in three school settings where the number of students who spoke another language at home ranged from 10% to 40%. The weekly choir rehearsal involved warm-ups that focussed on melody, rhythm and rhyme activities. A variety of pre-tests and post-tests were administered to determine deficits and improvements in specific auditory skills that are related to reading and musical literacy.

**Purpose of the Study and Research Plan:**

To examine a study of how playful segmentation of music and text improves auditory and meta-linguistic abilities of children.

1. To study the effects of segmentation of text for improvements of auditory skill in choristers;
i) Board-required Kindergarten Rosner, Sound-Letter and Yopp-Singer Segmentation tests to determine deficits and improvements in auditory skills.

2. To study the effects of segmentation of musical phrase for deficits and improvements of auditory skill in choristers;
   i) Board-approved Kodaly curriculum diagnostic tests for intonation using solfege activities.

Methods and Procedures, Research Protocol:

Ethical Review:

Ontario teachers were required to submit a professional learning plan that involved classroom or teaching assignment research-based projects, requiring principal permission. Data collection was approved by the Board’s Ethical Committee and required by the Board’s Assessment Office. This project involved a three-part study of content-subject areas including science, music and writing and had been approved by the University of Toronto’s Ethical Research Review Board. The project was entitled, “Collaboration Models for ELL and Content-Area Teachers.”

Participants:

Content-area teachers, Kindergarten teachers and ELL support staff working with diverse student populations in the Greater Toronto Area. Informed consent was required as a prerequisite to participation in this project.

Research Protocol:

A. Phonemic Segmentation test.

   i) Kindergarten and ELL teachers were required to use the Yopp-Singer, Sound-Letter Inventories and Rosner Phonemic Segmentation Awareness Test to determine program needs. Kindergarten teachers collected data and Administration entered the data into an electronic data base for program evaluation purposes only.

B. Melodic Segmentation test.

Four parts were completed for each subject and this data was collected for program evaluation and reporting purposes.
Scoring and Assessment

Phonemic Segmentation tests were scored by Kindergarten or resource teachers. This data was collected in order to assess Literacy Programs. Each test was administered by a qualified teacher and took no more than 10 minutes to administer. Pre-tests and Post-tests were completed over a four month period.

Each Junior and Intermediate solfege test was administered by a qualified teacher and took no more than 10 minutes to administer. Students had the option to perform for viva voce tests in a small group or in a one-to-one audition setting. Student solfege tests were scored by a qualified teacher for program evaluation and assessment purposes.

Results

Table 1: Phonemic Segmentation PretestTest #1 Red and PostTest#2 Blue

<table>
<thead>
<tr>
<th></th>
<th>Level 1: limited accuracy in phonemic segmentation 0/10-4.9/10</th>
<th>Level 2: some accuracy in phonemic segmentation 5/10-6.9/10</th>
<th>Level 3: consistently accurate in phonemic segmentation 7/10-8.4/10</th>
<th>Level 4: highly accurate in phonemic segmentation 8.5/10-10/10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sound-Letter Kindergarten Inventory</td>
<td>1/20</td>
<td>15/20</td>
<td>2/20</td>
<td>2/20</td>
</tr>
<tr>
<td>Phonics Song Program: A, E, I, O, U short and long</td>
<td>1/20</td>
<td>2/20</td>
<td>14/20</td>
<td>3/20</td>
</tr>
</tbody>
</table>

Table 2: Results from Junior/Senior Solfege Tests

<table>
<thead>
<tr>
<th></th>
<th>Level 1: limited accuracy in intonation of solfa 0/10-4.9/10</th>
<th>Level 2: some accuracy in intonation of solfa 5/10-6.9/10</th>
<th>Level 3: consistently accurate in intonation of solfa 7/10-8.4/10</th>
<th>Level 4: highly accurate in intonation of solfa 8.5/10-10/10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Echo Singing</td>
<td>1/20</td>
<td>14/20</td>
<td>5/20</td>
<td>7/20</td>
</tr>
<tr>
<td>Melodic Ear Puzzles; Well-known tune, 4 bars, fill in 3rd empty bar: Canoe song</td>
<td>1/20</td>
<td>12/20</td>
<td>7/20</td>
<td>8/20</td>
</tr>
<tr>
<td>Dictation: Familiar 4 bar melody over provided rhythm</td>
<td>2/20</td>
<td>10/20</td>
<td>8/20</td>
<td>10/20</td>
</tr>
<tr>
<td>Sight Reading: 4 bars, familiar tune from term 1 song repertoire</td>
<td>3/20</td>
<td>3/20</td>
<td>10/20</td>
<td>4/20</td>
</tr>
</tbody>
</table>
Analysis:

Segmentation of phoneme activities, supported by musical and chant activities that allowed students to practice segmentation, led to improvements in auditory skills. Nearly three quarters of two Kindergarten classes scored at a level 2 in the pre-tests. After practicing phonemic segmentation skills through music and play, 75% moved to a level 3. Deletion phonemic tasks, such as those that are tested by the Rosner Auditory skills assessment, are the most challenging for Kindergarten aged students.

Segmentation of melodic activities, supported by choral and Kodaly activities that allowed students to practice and reinforce melody singing, led to improvements in intonation skills. Solfege activities that reinforced relative pitch helped to develop Junior and Intermediate students’ inner ear. Most students scored a level 3 or 4 on a first term melodic dictation. Sight singing was the most challenging task out of the 4 solfege tests.

Because so much work had been done using solfege warmups, choral blend and intonation improved. The relationship between using Latinate solfege vowels and improvements in choral intonation was explored in Neuerburg’s (2012) research on the impact of vowels on pitch finding and intonation in the movable-do solmization system. He examines why the solfege system is still viable in a variety of choral settings.

Conclusions:

In all-select class or choral settings systematic approaches to teaching text and melody work best. A well-considered balance between a Kodaly solfege program and “awareness” games during choral warm-ups had positive impact on musical and language literacy.
Figure 1

Types of sound manipulation with examples using different linguistic units and musical activities that allow for guided practice: See Yopp, H. And Yopp, R. Supporting phonemic awareness development in the classroom. Playful and appealing activities that focus on the sound structure of language support literacy development. The Reading Teacher Vol. 54, No. 2 October 2000.

<table>
<thead>
<tr>
<th>Syllable</th>
<th>Onset-rime</th>
<th>Phoneme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Matching</td>
<td>Do these start the same?</td>
<td>Do these start the same?</td>
</tr>
<tr>
<td>sandwich sandbag (yes)</td>
<td>start stand (yes)</td>
<td>cat kite (yes)</td>
</tr>
<tr>
<td>Isolation</td>
<td>What do you hear at the beginning of under? (/un/)</td>
<td>What do you hear at the beginning of black? (/bl/)</td>
</tr>
<tr>
<td>Substitution</td>
<td>What word would you have if you changed the/ba̰/ in baby to /may/? (maybe)</td>
<td>What word would you have if you changed the/bl/ in black to /cr/? (crack)</td>
</tr>
<tr>
<td>Blending</td>
<td>What word would you have if you put these sounds together: /pup/-/py/ (puppy)</td>
<td>What word would you have if you put these sounds together: /pl/-/ane/ (plane)</td>
</tr>
<tr>
<td>Segmentation</td>
<td>Tell the parts you hear in this word: table (/ta̰/ — /ble/)</td>
<td>Tell the sounds you hear in this word: spoon (/sp/-/oon/)</td>
</tr>
</tbody>
</table>
| Phonemic Awareness songs | The Hungry Thing (oral)
The Hungry Thing, by Jan Slepian and Ann Seidler, is the story of a creature that asks townspeople for food by pointing to a sign on his chest that says FEED ME. “The Corner Grocery Store” The original lyrics include, “There were peas, peas walking on their knees at the store, at the store” and similar silly rhymes. “Going on a Bear Hunt”, “Clap Your Hands”, “The Ants Go Marching In” are other songs that can be adapted for phonemic awareness. | Twenty Kids Have Hats (oral) The book Ten Cats Have Hats by Jean Marzollo is counting book of rhymes: “One bear has a chair, but I have a hat. Two ducks have trucks, but I have a hat.” Read the book aloud to the children, and invite predictions. “Five pigs have . . .” The children may respond with wigs or twigs or figs. (Picture clues will allow them to predict the author’s rhyme). | “Down by the Bay” is another song that offers children the opportunity to create their own lyrics. After learning verses such as “Did you ever see a whale with a polka dot tail?” and “Did you ever see llamas eating their pajamas?” children create their own verses such as, “Did you ever see a shark strolling in the park?” |

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1 Yopp, H. And Yopp, R. Supporting phonemic awareness development in the classroom. The Reading Teacher Vol. 54, No. 2 October 2000.
Figure 2: Yopp-Singer (1995) and Rosner (1993) Phoneme Segmentation Awareness Tests

Student Test Sheet

Yopp-Singer Test of Phoneme Segmentation

Student's name _____________________________ Date _____________

Score (number correct) ____________

Directions: Today we're going to play a word game. I'm going to say a word and I want you to break the word apart. You are going to tell me each sound in the word in order. For example, if I say "old," you should say /o/-/l/-/d/.” (Administrator: Be sure to say the sounds, not the letters, in the word.) Let's try a few together.

Practice items: (Assist the child in segmenting these items as necessary.)

ride  go  man

Test items: (Circle those items that the student correctly segments; incorrect responses may be recorded on the blank line following the item.)

1. dog  ______________________  12. lay  ______________________
2. keep  ______________________  13. race  ______________________
3. fine  ______________________  14. zoo  ______________________
4. no  ______________________  15. three  ______________________
5. she  ______________________  16. job  ______________________
6. wave  ______________________  17. in  ______________________
7. grew  ______________________  18. ice  ______________________
8. that  ______________________  19. at  ______________________
9. red  ______________________  20. top  ______________________
10. me  ______________________  21. by  ______________________
11. sat  ______________________  22. do  ______________________
**Figure 3 Rosner’s (1993) Test of Auditory Assessment of Segmentation**

The TAAS evaluates the child’s ability to identify the separate sounds in spoken words and the temporal sequence of those sounds. It does this by asking the child to delete sounds and to show that s/he can do this by voicing what is left after the deletion. Children are first able to grasp this concept at about age four and become better at it from then on. The TAAS is for use with kindergarten children (and some preschool children). One caution: this test should not be administered for stage 1 ESL students. Stage 2-4 students should only take the test if it is supported with visual aids, such as flash cards.

**Demonstration Items**

The first two items of the test (items A and B) are for demonstration, for familiarizing the child with the test. For example, item A asks the child to “Say ‘steamboat,’” and then once s/he has said it (thereby demonstrating that he heard and remembers it, at least for the moment), “Now say it again, but this time don’t say ‘boat’; just say what’s left.” The average 4-year-old can do this – delete a syllable from a two-syllable, compound word. If the child does not understand the task, try teaching it to him/her in the following way:

1. Have the child extend his/her two hands forward.
2. Repeat the item slowly, emphasizing the two separate syllables by pausing between them.
3. Touch his/her left hand as you say the first syllable (“steam”) and his/her right hand as you say the second syllable (“boat”), thereby giving him/her a visual/spatial reference point for each of the syllables.
4. If he/she is still unable to comprehend the task, explain to him/her that “this hand” (touch his/her left hand) “says ‘steam,’” and “this hand” (touch his/her right hand) “says ‘boat.’”
5. Then repeat the item: “Say ‘steamboat.’” (Again, touch each hand as you say its syllable.) Then, after s/he has said “steamboat”: “Now say it again, but leave off ‘boat.’ Just say what’s left.” (As you say the last two sentences, move his/her right hand to his/her side, allowing only the left hand to extend forward.)

**TAAS**

Clinician says:

A Say cowboy Now say it again, but don’t say boy cow
B Say steamboat Now say it again, but don’t say steam boat
1 Say sunshine Now say it again, but don’t say shine sun
2 Say picnic Now say it again, but don’t say pic nic
3 Say cucumber Now say it again, but don’t say “q” cumber
4 Say coat Now say it again, but don’t say /k/ (the k sound) oat
5 Say meat Now say it again, but don’t say /m/ (the m sound)eat
6 Say take Now say it again, but don’t say /t/ ache
7 Say wrote Now say it again, but don’t say /t/ row
8 Say please Now say it again, but don’t say /z/ plea
9 Say clap Now say it again, but don’t say /k/ lap
10 Say play Now say it again, but don’t say /p/ lay

To Score the TAAS:

If item 1 is passed, go on to item 2, and continue testing until the child has failed two successive items. The score is the number of the last correct item. For example, if the child passes item 1, 2, and 3, then fails item 4, passes items 5 and 6, then fails items 7 and 8, the test stops and his score is recorded as 6.

**TAAS Score Expected for Children in: Level ***

<table>
<thead>
<tr>
<th></th>
<th>K</th>
<th>1</th>
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</thead>
<tbody>
<tr>
<td>2</td>
<td>K</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>K</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>Gd. 1</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>Gd. 1</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>Gd. 1</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>Gd. 1</td>
<td>4</td>
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<td>8</td>
<td>Gd. 1</td>
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<td>9</td>
<td>Gd. 1</td>
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<td>10</td>
<td>Gd. 2</td>
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<td>11</td>
<td>Gd. 2</td>
<td>5</td>
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<tr>
<td>12</td>
<td>Gd. 3</td>
<td>6</td>
</tr>
<tr>
<td>13</td>
<td>Gd. 3</td>
<td>complete</td>
</tr>
</tbody>
</table>
Appendix: Sample Repertoire List:

i. J’entends le Moulin--Emily Crocker

J’entends le moulin ((I Hear the Wind Mill)). Arranged by Emily Crocker. For Choral (2-Part). Discovery Choral. 12 pages. Published by Hal Leonard (HL.8551983).

Hear the steady ticka-tacka of the mill wheel in this brisk setting of a French Canadian folksong. Use the pronunciation guide on the VoiceTrax CD or on the inside cover to practice the French lyrics, this selection is easily learned and fun to sing! VoiceTrax CD also available. Performance Time: Approx. 2:15. Musical teaching points: Head tone, especially for final “coda” section, a canon, two part texture which broadens to three part texture and the repetitive rhythmic pattern: ti-ti-ka ti ti, tika-tika ti ti.

French settlers brought music with them when inhabiting what is now Nova Scotia, Quebec and other areas throughout Canada. Since the arrival of French music in Canada, there has been much intermixing with the Celtic music of Anglo-Canada. French-Canadian folk music is generally performed to accompany dances such as the jig, jeux, dansé, ronde, cotillion, and quadrille. The fiddle is perhaps the most common instrument utilized and is used by virtuosos such as Jean Carignan, Jos Bouchard, and Joseph Allard. Also common is the diatonic button accordion, played by the likes of Philippe Bruneau and Alfred Montmarquette. Spoons, bones, and jaw harps are also played in this music.


A good concert or festival feature, this creative setting of Cindy: Simple Gifts and Pick A Bale Of Cotton contains a medley and “mash up” of three folk tunes. Accessible to choirs with limited rehearsal time, it's arranged in a unique, fresh style, with optional hand claps to add to the fun! Musical Teaching points: head tone, light rhythmic style, precision of harmonic interpolations, clarity of diction.

Much of the folk music tradition in the United States was preserved by community singing groups. These songs were preserved in a variety of ways, including the Shape Note song book. Shape notes are a music notation designed to facilitate congregational and community singing. The notation, introduced in 1801, became a popular teaching device in American singing schools. Shapes were added to the note heads in written music to help singers find pitches within major and minor scales without the use of more complex information found in key signatures on the staff. Through the work of religious communities, a
diverse repertoire had developed that ranged from the simple melodies of Shaker song to the rich harmonies of shape-note hymns and simple folk tunes so called because the shape of the note - rather than its position on the staff - indicated its pitch.

iii). It Don’t Mean a Thing, If It Ain’t Got That Swing--Duke Ellington, Roger Emerson arrangement

It Don’t Mean a Thing (If It Ain’t Got That Swing) by Duke Ellington (1899-1974) and Irving Mills (1894-1985). Arranged by Roger Emerson. For Choral (2-Part). Discovery Jazz. 12 pages. Published by Hal Leonard (HL.8551779). A true musical classic now available in the Discovery Jazz Series. Expertly arranged for younger choirs this is the perfect introduction to the music known as “Swing.” Available separately: 3-Part Mixed, 2-Part and ShowTrax CD. Performance Time: Approx. 2:30. Musical Teaching points: 4/4 is “felt” in 12/8. Jazz vocal tone is “breathy”, vibrato is used sparingly, energetic approach to all notes and internal and ending consonants are de-emphasized.

Phil Mattson and Voices Iowa presented “Vocal Jazz: History, Literature, Technique”.

The roots of jazz music were very much vocal, with field hollers and ceremonial chants, but while the blues maintained a strong vocal tradition, with singers such as Ma Rainey and Bessie Smith heavily influencing the progress of American popular music in general, early jazz bands only featured vocalists periodically, albeit those with a more "bluesy" tone of voice; one of the first "jazz" recordings, the 1917 Original Dixieland Jass Band recordings featured one Sarah Martin as vocalist. It was Louis Armstrong who established singing as a distinct art form in jazz, realising that a singer could improvise in the same manner as instrumentalist, and establishing scat singing as a central pillar of the jazz vocal art.

With the end of prohibition in the United States, a more "danceable" form of jazz music arose, giving birth to the Swing era, and with it big bands such as those led by Count Basie, Benny Goodman, Duke Ellington, Tommy Dorsey, Jimmie Lunceford, Glenn Miller, Artie Shaw and Chick Webb. Many of the great post war jazz singers sang with these bands in the infancy of their careers.

The Phil Mattson Singers presented a workshop on Sunday morning demonstrating all the elements of Jazz. Phil Mattson, their director has written arrangements that are used by Manhattan Transfer, The Four Freshmen, The Real Group, Chanticleer, the Dale Warland Singers.
The group sang arrangements of

“Almighty God/Heaven” by Duke Ellington arr. Duke Ellington,
Is God a Three-Letter word for Love?, Father Forgive.
Accentuate the Positive, by Billie May, ed. Phil Mattson
Evening Prayer, by E Humperdinck, arr. Phil Mattson
I’ll Be Seeing You. Irving Kahal and Sammy Fain, arr. Phil Mattson

iv).  **Hymn to Freedom--Oscar Peterson**

Recognised as one of Oscar Peterson’s most significant compositions, Hymn to Freedom was written in 1962 and was swiftly embraced by people all over the world as the anthem of the Civil Rights Movement. For inspiration, Peterson drew upon various church renderings of spirituals recalled from his childhood in Montreal. He aimed to maintain the unadorned, yet poignant quality of these early Baptist hymns. Harriette Hamilton collaborated with him on the lyrics to express in simple language the hope for unity, peace and dignity. **Musical teaching points**: head tone, sol fa rendering of octave jumps, open, relaxed vowels, slight “swing”.

v).  **The Moon-- Andy Beck**

Written especially for two-part choirs, this inquisitive piece features lyrical unisons, echo singing, and sensible duet harmonies. A haunting piano motive represents the moon throughout as the childlike text ignites your choir's collective imagination. "O moon, shining in the night... come again tomorrow night..." A marvelous, luminous nocturne for young voices! Highly recommended! **Teaching points**: uniformity of vowels, vowel sound blend, solfa for in tune harmonies, precision of consonants, and the difficulty of “placing” the final open fifth using head tone and inner ear.

vi).  **Lake Isle of Innisfree-- Eleanor Daley (Canadian Composer)**

'The Lake Isle of Innisfree by Eleanor Daley, text is the famous poem by Yeats.. For SSA choir and piano. Upper Voices. Secular, Choral Leaflet. Vocal score. 8 pages. Duration 3'. Published by Oxford University Press (OU.9780193426528). ISBN 9780193426528. Secular, Choral Leaflet. 10 x 7 inches. For SSA and piano A simple, delightful setting of a Yeats poem which embraces nature's beauty and the secret joy of solitude. Suitable for concert use.
Teaching points: clarity of diction, purity of vowels, supported breathing for phrases, harmonic delicacy, head tone.
Bibliography

Bada, E. (2000). Culture in ELT. Cukurova University Journal of Social Sciences (6), 100-110. According to Bada (2000: 101), “the need for cultural literacy in English Language Teaching arises mainly from the fact that most language learners, not exposed to cultural elements of the society in question, seem to encounter significant hardship in communicating meaning to native speakers.”


Consistent with the belongingness hypothesis, this study explores how people form social attachments readily under most conditions and resist the dissolution of existing bonds. Belonging appears to have multiple and strong effects on emotional patterns and on cognitive processes.


Based on a paper on how North American folk music can be a resource to teach genre and language awareness. Various folk music genres appropriate for elementary classrooms are: Historic Ballad, Chorus and Verse, 12 Bar Blues, “adding” songs (e.g. the spider and the fly).


Phillips, K., Teaching Kids to Sing (Wadsworth, 1996).


Andre Quadros, ed. 2000, Many Seeds, Different Flowers; the Music Education Legacy of Carl Off, Perth: CIRCME.

Andre Quadros, ed. 2000, Many Seeds, Different Flowers; the Music Education Legacy of Carl Off, Perth: CIRCME.


**Pronunciation:**


*Discusses theoretical (vocal organs, breathing mechanism, tongue and manipulations) and practical sides (a good ear to hear vowel and consonant production) of teaching pronunciation.*


Music Education (Recent) Research:


Shaw, J., “The Skin that We Sing: Culturally Responsive Choral Music Education.” Music Educators Journal June 2012 vol. 98 no. 4 75-81.