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CONTENTS

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The Effect of Repertoire Selection on University Interscholastic League Choral Concert Ratings

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"Declaring that competition is important to Texas music educators would be a singular understatement of epic proportions" (May, 1989, p. 6). In the state of Texas, one of the primary means by which the teaching ability of secondary music educators is assessed is their ensembles' ratings in University Interscholastic League (UIL) Concert and Sight Reading competition. This practice is not limited to Texas, however. Batey (2002) points out that nationwide, competition results serve either as a validation of ensemble directors' skills, or a testimony to their inadequacy. Further, she states that contest ratings can affect job retention or loss, as well as recruitment of ensemble members for the following school year.

With so much importance being placed on UIL competition, the question arises, "What can directors do to ensure that their ensemble will be successful?" Many educators (Crocker, 2000; Batey, 2002) agree that choice of repertoire is the single most critical factor in determining an ensemble's rating. Superior musical performance is strongly affected by choosing music that is suitable for the vocal requirements of a particular group (Crocker, 2000). Adjudicators weigh the choice of music heavily, noting whether the literature is appropriate for the technical skill and maturity level of the singers (Batey, 2002).

Research (Forbes, 2001; Reames, 2001) indicates that effective choral music educators have an extended knowledge of choral literature and a high level of skill in selecting music suitable for their ensembles. Forbes and Reames suggest that in order to create and maintain effective choral programs, it is essential for choral directors to construct a broad repertoire of literature, and effectively match the music to a particular ensemble.

Additionally, Brunner (1992) maintains that careful and critical selection of literature that is appropriate to the physical maturity and understanding of the singer helps facilitate the mastery of a broad scope of choral music skills, including: healthy vocal technique; listening and sight reading skills; music history, theory, and appreciation; and musical expression, sensitivity, and aesthetic response. He says that selection of repertoire that is meaningful and challenging, as well as accessible and successful, requires a director to take into account the singers' training, ability, and experience. Further, Brunner believes that effective literature selection will enhance the singers' musical experience and serve as a catalyst for future creative and artistic development.

Failure to select appropriate choral literature can not only lead to failure in musical performance, but also can have detrimental effects on the vocal mechanism. Crocker (2000) states that music that

extends the limits of appropriate tessitura, difficulty level, or texture will likely result in inaccurate intonation, poor tone quality, and inappropriate style. Spurgeon (2002) adds that the selection of repertoire that is too demanding can cause singers to develop inappropriate and unhealthy singing habits. She explains that singing music designed for more mature voices, which demands too wide a range or taxes the tessitura, can result in vocal damage.

Many of the experts in the field contend that the most essential prerequisite for successful repertoire selection is a well-developed philosophy of music education (Forbes, 2001). A teacher's philosophy influences every decision he or she makes, including decisions about literature. Brunner (1992) affirms that directors must focus on their philosophy, goals, and objectives in the selection of repertoire. Corbin (2001) suggests that the ultimate goal of any ensemble experience should be to attain self-confidence, performance skills, and music appreciation. Apfelstadt (2000) adds that music educators convey what they believe students need to learn to grow musically through the repertoire they choose. Wis (2003) agrees that the student's musical growth and experience should be the top priority, adding that the quality of the musical experience is directly related to the quality of the repertoire selected.

The obvious question arises, "Is every teacher concerned about musical growth when selecting UIL literature?" Apfelstadt (2000) believes that even when the repertoire selection process is limited to the state list, directors continue to have the responsibility to select music that enables students to develop an understanding of concepts.

Thus, one of the most daunting, yet important tasks faced by Texas choral directors is the selection of the appropriate three compositions to be listed on the UIL Concert competition form. The determination of whether or not the musical challenges in the music are appropriate or attainable for the maturity and experience level of the ensemble is a critical factor in the selection process. Some directors seem to "play it safe" by choosing music to fulfill the minimal requirement level. However, they potentially run the risk of boring students by selecting music that is too simplistic. Other directors may elect to perform one or more pieces at levels higher than required, Yet music that is too challenging may frustrate students (Apfelstadt, 2000).

Because, ultimately, neither philosophical goals nor superior ratings in UIL competition can be achieved by performing inappropriate literature, the question presents itself: "Does the difficulty level of the literature performed at UIL choral concert competitions in the state of Texas have any relationship to the ratings choirs receive?"

The purpose of this study was to compare UIL high school choral concert competition ratings with the difficulty level of literature performed. Further, a comparison of three geographical regions was made to ascertain if the same percentage of choirs performed literature from each level of difficulty.

Method

UIL Choral Concert competition ratings were procured during 2003 from high school contests in three different regions in Texas. Subjects consisted of judged ratings of randomly selected choirs in 3 regions. After noting the school classification based on the size of student population (AAAAA, AAAA, etc.) and the skill level of each choir (varsity or non-varsity), the minimal level of difficulty of literature required for each choir was determined, using the guidelines listed in the Prescribed Music List (PML) (Floyd, 1999). According to the PML, each choir is required to perform three selections, two of which must be listed in the PML. PML categories range from Grade 1 (least difficult) through Grade 6 (most difficult). For example, the minimal level requirement of a AAA

varsity choir is to perform a Grade 3 and a Grade 2 selection. Finally, using the PML as a guide, the grade level of each musical selection performed by the choirs was denoted.

   Choirs singing two selections at the minimal level of difficulty required were marked with an *M*. Choirs singing one selection at the minimal level and one selection a grade above the minimal level were marked with a *+1*. Choirs singing two selections one grade above the minimal level, or one selection two grades above the minimal level were marked with a *+2*. Ten choirs from each difficulty level (i.e., M, +1, +2) were randomly selected for each of the three regions. The final sample of the study consisted of 90 choirs.

   In accordance with UIL procedure for concert competition, three judges assigned scores to each choir, with ratings ranging from 1 (superior) to 5 (poor). Subsequently, for purposes of this experiment, the total of the three UIL judges' scores for each choir's performance was calculated. For example, if the judges' scores were 1, 1, and 2, then the total score would be 4 (1+1+2).

Results

   Dependent measures consisted of the final rating of each of the choirs in UIL concert competition. The independent measures were Region (Region A, Region B, and Region C) and Level of Difficulty (M, +1, +2).

   A Two-Way ANOVA was applied (3 regions X 3 levels of difficulty). Significant differences were found for Region (F = 5.92 p < .003) and Level of Difficulty (F = 3.88 p < .024), but there were no significant interactions.

   The Tukey HSD multiple comparison test subsequently indicated that the choirs that performed literature at a +2 level of difficulty (mean = 3.83) had significantly higher ratings than the choirs that performed literature at the minimal level of difficulty (mean = 5.16) Those groups that performed literature at a +1 level of difficulty had a mean score of 4.8, which was not significantly different from the +2 level or the minimal level of difficulty.

   Results of the Tukey HSD multiple comparison test (Table 3) indicated that the ratings of the choirs in Region C (mean = 3.73) were significantly higher than the ratings in Region B (mean = 5.43). Region A had a mean score of 4.63. No other differences were significant.

   Although statistical analyses were performed on only 30 choirs randomly selected from each region, examination of the total number of choirs competing revealed that the three regions had varying percentages of choirs assigned to each of the three levels of difficulty (Table 1). The greatest percentage of choirs in each of the regions performed music at the minimal level of difficulty: Region A - 46%; Region B - 47%; Region C - 51%, with an overall average of 48%. The smallest percentage of choirs in each of the regions performed music at the +2 level of difficulty: Region A - 21%; Region B - 23%; Region C - 15%, with an overall average of 20%.

Table 1

Percentage of Choirs Performing Literature at Each Level of Difficulty by Region

Region	M	+1	+2
A	46%	33%	21%
B	47%	30%	23%
C	51%	34%	15%
Total Average	48%	32%	20%

Note. M = minimal level of difficulty;
+1 = one selection at the minimal level and one selection a grade above the minimal level;
+2 = two selections one grade above the minimal level, or one selection two grades above the minimal level

Discussion

The purpose of this study was to examine the relationship between the level of difficulty of literature performed and the ratings a choir receives in UIL competition. Results indicated that the choirs performing literature at the minimal level of difficulty received significantly lower ratings than the choirs performing literature at the +2 level (highest level of difficulty). No significant difference was indicated among the choirs performing literature at +1 level of difficulty (medium level) and the other two groups.

A further aspect of this study was to determine the percentage of choirs that performed music at the various levels of difficulty. In each region, the largest percentage of choirs performed literature at the minimal level of difficulty and the smallest percentage of choirs performed literature two levels above the required level of difficulty.

The diversity of difficulty levels of music chosen by directors in each of the three regions can only be explained by conjecture in that there appears to be a lack of previous documentation in this area. It might be assumed that the majority of choral directors choose to "play it safe" by doing the least musically challenging literature. Furthermore, it might be assumed that fewer directors are willing to take the risk to program more challenging music. Or, it might be postulated that the level of literature recommended by the PML accurately addresses the ability level of the corresponding choir.

The mean of the ratings in each of the three regions was divergent. There was a significant difference between the mean of the ratings in Region B (5.43) and Region C (3.73). One possible explanation for the difference in the overall ratings among the three regions is the difference in judging panels. Judges for UIL Concert Contest are required to be members of Texas Music Adjudicators Association (TMAA) (2003), which has strict membership requirements, as well as compulsory periodic training sessions. However, due to the diversity of opinion regarding what type

of performance constitutes a specific rating, the contest results can vary in accordance with the judging panel assigned.

Further research in this area could be beneficial to determine if the ratings of choirs that perform more difficult literature are higher due to the skill level of the singers or because the directors set elevated standards for the choirs. A survey of directors whose choirs receive the highest ratings could be done to assess their years of experience and past success in competition, as well as their knowledge of choral repertoire. Further study might evaluate the ratings of inexperienced directors to determine if their lack of knowledge of literature is a factor in their ratings. Examination of the feeder choral programs could also provide pertinent data.

Selection of literature seems to be a factor in earning high ratings at UIL Choral Concert competition. Although the majority of choral directors chose literature at the minimal level of difficulty, the choirs performing literature at the +2 level of difficulty had significantly higher ratings. Perhaps the directors who set higher goals for their choirs in terms of literature, also set higher standards in terms of overall performance. On the other hand, the directors who choose literature at the minimal level of difficulty might also have minimal expectations of their choir's ability and performance. Ratings might be an indication of a director's expectation of his/her choir's performance—the lower the expectation, the lower the performance, and the higher the expectation, the higher the performance. Therefore, selection of literature might be a factor in UIL choral competition ratings because it reflects the philosophy and attitude of the director, which, in turn, affects the level of performance of the choir.

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Testing the Relationship of Prior Musical Training and the Musical Aptitude Scores of Beginning Instrumental Students

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The creation of a viable recruitment program is essential to any music education program. Music educators are confronted with many issues regarding the planning and the execution of a good recruitment program. Music educators also understand that a viable feeder program is essential to the success of their respective programs in the high school year. Band, choral and orchestra directors alike are very concerned with attracting the very "best" students to their program; therefore, one of the most important aspects of the instrumental music program is the recruitment of potential students.

A variety of benchmarks are available to the instrumental music educator for use in their recruitment and selection processes. For example, various academic achievement test results are often a part of the students' ongoing cumulative file. In addition, other academic profiles are available to the music educator for the design and implementation of the recruitment and the selection process including various IQ assessments or norm-referenced or criterion-referenced testing data.

Since musical aptitude is complex and many different variables, especially nonmusical variables (Hedden, 1982; Rainbow, 1965), may impact musical aptitude, it is imperative that music educators develop a practical matrix for the recruitment and ultimately, the selection process of potential students. Attraction and retention of good students can be the hallmark of a successful music education program right from the beginning years of the program. For as Boyle (1992) asserted, the compilation of information about a student's musical ability is of utmost importance to music educators because it offers important implications for instructional, curriculum, and program changes that take into account students' individual differences.

The testing of musical ability or potential musical achievement dates back to the late nineteenth and the early twentieth century with the work of Wundt in Germany and in the United States with the pioneering work of Carl Seashore. Since the Seashore tests were developed, researchers began to study the constructs of musical aptitude and began to apply their findings to real classroom settings. One of the early pioneers in the constructs of musical aptitude was Rainbow (1963) who worked upon different facets (constructs) of musical aptitude and concluded that variables outside of music such as academic achievement, academic intelligence and socioeconomic background were

significant predictors of musical ability. In the latter part of the twentieth century, theories involving musical aptitude diverged. According to Boyle (1992) much of the controversy regarding musical aptitude testing has evolved from questions about the actual tasks for predicting musical potential.

For example, the research of Karma (1982, 1986) regarding musical aptitude maintained that reliance on a simple discrimination task, as a measure of musical aptitude were inappropriate and that musical aptitude involved perceptual and conceptual structuring of music. According to Boyle (1992), Karma contended that these structuring strategies provide a much stronger basis for musical aptitude as a psychological construct. Gordon (1984, 1987) took a more developmental approach to musical aptitude and concluded that musical aptitude fluctuates until about the age of nine, after which it becomes more stabilized. Sloboda (1985) concluded that a cognitive representation of tonality and meter was developed through a process of enculturation and asserted that enculturation was the dominant process in Western culture until a child was about ten years old.

Regardless of the specific tasks that are employed from different measurement instruments and the different theories that exist on musical aptitude, the research clearly indicates that musical aptitude is complex and may involve musical and nonmusical variables. Since the literature on musical aptitude has indicated that musical aptitude may involve nonmusical variables, the early childhood literature may offer some insight into this complex subject.

According to Woody (2001) researchers in the last decade in the field of music psychology have worked with highly-skilled musicians to study the factors that most contributed to their expert performances. For example, Howe and Sloboda (1991a) concluded that children who have become skillful musicians usually grew up with music as a normal part of the home environment, often through parents or siblings. Furthermore, Davidson, Moore, Sloboda and Howe (1998) concluded that children experiencing positive initial exposure and continued participation in music were more likely to begin formal musical training, typically in the form of music lessons, which have been shown to yield greater skill improvement than mere group instruction. In addition, the choice of the child's initial music teacher may be critical (Howe &Sloboda, 1991b) and parents can provide a primary source of support and motivation in the beginning stages of musical skill acquisition (Zdzinski, 1996).

Recent brain research and its link to musical development may also lend insight into the complex issue of musical aptitude and the potential success of a student entering into an instrumental music program. Hodges (2000) discussed "neromusical" studies and concluded that there was increasing evidence that music was a biological right for humans and that humans responded to musical stimuli from the womb to old age. Hodges further asserted that training in musical skills causes different brain transformations from those of persons who have not received musical training and that the musical brain is modularized, with specific structures in the brain carrying specific musical tasks. Indeed, the malleability of the brain (Diamond, 1967) and the potential power of enriched environments to affect subsequent neural connections are realities. Brain research and the importance of early exposure to musical training is well documented in the literature and has far-reaching implications with regard to the child's home, the school and the community (Jensen, 1998; Sylvester, 1995).

The literature on college success in music and the impact of selected variables, such as academic ability, musical experience and musical aptitude could also lend insight into the issue of musical experience and its possible relationship to musical aptitude. Harrison (1990) analyzed the relative contributions of academic ability, musical experience and musical aptitude to the prediction of grades in a college freshman music theory course and found that the best predictor of grades was the math portion of the Scholastic Aptitude Test (SAT). Harrison et al. (1994) also studied the influence of musical aptitude, academic ability, musical experience and motivation of 142 college music

theory students on the development of aural skills and concluded that musical aptitude had the largest effect on aural skill performance in the classroom. Similarly, in a later study, Harrison (1996) employed multiple regression analysis to examine the relative contributions of musical aptitude, musical experience and gender in the prediction of grades in a college music class for non-music majors. She concluded that performance experience was the only statistically significant grade predictor for the sample.

Method

The purpose of this study was to test the relationship of prior musical and dance training to the musical aptitude scores of beginner instrumental music students across one academic year. Prior musical training in this study was defined as previous piano and guitar training, prior choir training for children in a church setting, prior handbell ensemble training for children in a church setting and prior training in dance. Musical aptitude was defined as scores on the composite score of the *Selmer Music Guidance Survey* (1980). The following research question was addressed descriptively and analytically: Did prior musical training, as defined in the study, have a significant relationship to musical aptitude scores as measured by the *Selmer Music Guidance Survey* (1980) across one academic year?

The hypothesis stated that there was no relationship between prior musical training, as defined in the study, and the musical aptitude scores of beginning instrumental students, as measured by the *Selmer Music Guidance Survey* (1980). For this study it was assumed that comparable data were available on the number of pupils in the district under study and that data on the variables, as defined in this study, were available for all students being studied in a standardized format. Likewise, this study was limited to one Texas Independent School District for one academic year. Similarly, definitions of the variables that defined prior musical training and musical aptitude were important because other variables and school site data could yield very different results. The basic design was a correlation study used to determine the relationship between prior musical training and musical aptitude composite scores of beginner instrumental music students.

The sampling technique was a purposive technique. The intact sample consisted of 90 ($n = 90$) sixth grade instrumental music students in a Texas school district. According to Gay (1981), 30 subjects are considered to be a minimally acceptable sample size for a correlation study. This sample met and exceeded that particular benchmark in the literature. Students were given the *Selmer Music Guidance Survey* (1980) to serve as a guide to instrument assignment and general assessment of the individual needs of the selected band students at the beginning of the school year. Students were interviewed for physical characteristics to match those characteristics for instrument placement in the sixth-grade year, the year in which these students began their instrumental music training. The reliability coefficient was computed on a split-half procedure and the Spearman-Brown prophecy formula was used for correction purposes.

The point biserial correlation coefficient was computed, examining the relationship between prior musical training and the *Selmer Music Guidance Survey* (1980) composite scores of the band students in the purposive sample. The significance level was set at .01 ($p < .01$).

Results

The reliability coefficient of the *Selmer Music Guidance Survey* (1980) composite scores was .72 ($n = 336$) set on an entire sample of a fifth-grade class during the 2000-2001 school year. With the

Spearman-Brown formula, the coefficient was .84 on a split-half reliability coefficient technique. The coefficient compared favorably with the Gordon (1986) Intermediate Measures of Music Audiation composite score, although the Gordon sample was larger. The Gordon survey reliability coefficient was .80 on a split-half technique (n =752). The *Selmer Music Guidance Survey* (1980) descriptive statistics yielded a mean of 79.774, a standard deviation of 9.982 and that set the coefficient of variation for the sample at .125 or a variation of 12.5% across the entire sample ($n =$ 90). The maximum score for the sample was 98 and the minimum was 58, setting up a range of 40 and a range ratio of 1.69. Similarly, the median for the entire sample was 80 ($n = 90$). These descriptive statistics are illustrated in Table 1.

   The point biserial correlation technique was computed, examining the relationship between the *Selmer Music Guidance Survey* (1980) composite scores and the musical training variables of the instrumental music students in the purposive sample. The significance level was set at the .01 level ($p < .01$). The correlation coefficients for prior musical experience as defined in the study and musical aptitude ranged from .086 to .408. All correlations were positive and only piano was significant at the .01 level ($r = .408, n = 90, p < .01$). The correlation for the Selmer composite scores and church choir was .124. Likewise, the correlation for the Selmer composite scores and prior training in handbells was .118. The correlations for the Selmer and prior training in dance and guitar were .086 and .187 respectively. These results are shown in Table 1.

Table 1

Point Biserial Correlation models for the Prior Musical Experience Variables and <u>Selmer Music Guidance Survey</u> (1980) Composite Scores.

	Piano	Church Choir	Handbells	Dance	Guitar
Participation (Yes)	24	41	10	23	8
Participation (No)	66	49	80	67	82
Selmer Composite (Yes)	86.833	81.073	83.111	81.217	85,751
Selmer Composite (No)	77.166	78.632	79.325	79.238	79.158
Score Difference	9.667	2.441	3.786	1.979	6.593
Total N for Sample	90	90	90	90	90
Percentage of Yes Participants	26.67	45.56	11.11	25.56	8.89
Percentage of No Participants	73.33	54.44	88.89	74.44	91.11
Point Biserial Correlation Coefficient	**.408****	.124	.118	.086	1.87

Table 1 (continued)

Selmer Music Survey Descriptive Statistics

Mean	79.774
Standard Deviation	9.982
Coefficient of Variation	0.125
High Score	98.000
Low Score	58.000
Range of Scores	40.000
Median of Scores	80.000
Range Ration	1.690

Source: Selmer Music Guidance Survey (1980) and survey results for one academic year.
** ($p < .01$)

Discussion

The first analysis that was performed on the data in this study was a correlation methodology to determine the reliability coefficient of the *Selmer Music Guidance Survey* (1980) employed in this study. The split-half method was used to establish the reliability coefficient and the Spearman-Brown prophecy formula was also used for correction purposes. Likewise, the standard error of measure was computed for the *Selmer Music Guidance Survey* (1980). The findings of the reliability coefficient analysis indicated that the reliability coefficient of the *Selmer Music Guidance Survey* (1980) composite scores was .84 ($n = 336$), set on an entire sample of a fifth-grade class during the 2000-2001 school year. That coefficient compared favorably with the Gordon (1986) *Intermediate Measures of Music Audiation* composite score, although the Gordon sample was larger. The Gordon survey reliability coefficient was .80 on a split-half technique ($n = 752$).

Based on the findings in the reliability coefficient analysis, the Selmer test compares favorably with the Gordon test as long as the researcher keeps in mind that the sample sizes were different and further research with the Selmer composite needs to be undertaken to see if the coefficient holds true under a larger sample size.

The second analysis that was performed on the data was a point biserial correlation technique, to determine if prior musical training showed a relationship to the *Selmer Music Guidance Survey* (1980). The findings of the point biserial correlation analysis indicated that although the coefficients were positive, only piano was positive and significant at the .01 level ($p < .01$, $r = .408$, $n = 24$). Based on the findings in the point biserial correlation analysis, the research question asked, "Did prior musical training show a relationship to the composite musical aptitude scores in the sample?" It can be stated that only prior piano training had a significant relationship to composite musical aptitude scores.

Since the Selmer test does compare favorably to the Gordon test, more research is needed to determine if a larger sample size affects the reliability coefficient. Since little research has been done on the Selmer test, the results of this study indicated that it is reliable enough to use as one of many potential benchmark measures. It should be noted that no musical aptitude survey should keep any student from entering band. Other factors will certainly give the director a better picture of their

potential for success in band. Use of core teacher recommendations, general music teacher recommendations, administrative input, prior musical experiences and physical matching of chosen instruments can all enter into the picture in placing a student in band. The musical aptitude survey should only be used as a benchmark; the Selmer test seems to be as reliable as the Gordon test (1980) when the composite scores are used.

   Although no casual relationships can be determined from the analysis, prior training in piano showed a significant relationship to the Selmer composite scores. Similarly, use of the Selmer test as a benchmark for success makes practical sense, based on the reliability findings of this study and findings of other studies (Holsomback, 2001, 2002). More research needs to be conducted across longer periods of time to see if this relationship (prior piano training and musical aptitude) holds true.

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A Survey of Early African-American Military Musicians From the American Revolution to World War II

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Bands have always been an important part of the military, to inspire troops and civilians alike during war and peacetime. However, little is known about the roles that African-American musicians played as bandmasters, as well as performers throughout the early history of this country's military musical organizations.

The purpose of this paper is to explore the existent sources regarding early African-American military musicians with the intention of determining topics for further research. Areas discussed include African-American musicians mentioned as participants in the American Revolution, the Civil War, the War of 1812, the Seminole War, the Mexican War, the Spanish-American War, World War I and World War II.

Early African-American Military Musicians

African-American musicians and bands have been a part of the United States Armed Forces since the American Revolution ("Museum," 2001). Initially, most individual musicians participated as drummers, fifers, and trumpeters (buglers), although it has been suggested that there may have been an all-African-American marching band in Philadelphia, Pennsylvania that performed during the late eighteenth and early nineteenth centuries ("Museum," 2001).

This group was probably the all-African-American marching band that was under the leadership of Matt Black and was active in Philadelphia, Pennsylvania as early as 1818. Frank Johnson, a well-known African-American composer and bandmaster in Philadelphia, Pennsylvania, was believed to have been a member of this band (Handy, 1998; Southern, 1982; "Museum," 2001). One of the few existing pictures of Johnson appears in an article written by Floyd (1997) for *The Black Perspective in Music*.

Although much of Frank Johnson's early musical career is largely undocumented, there is evidence of his many accomplishments later in his life (Floyd, 1999; Southern, 1982). For example, he is recognized as the first African-American to have music published in the United States. Mr. Johnson's first published pieces were a set of cotillions that were published in an 1818 edition of George Willig's *Musical Magazine* (Harley, 1995; Floyd, 1999; Southern, 1982).

In 1837, Frank Johnson also became the first American of any color to tour Europe as a musician. For this tour, Johnson assembled a small group of his bandsmen, which consisted of four other

African-American musicians: William Appo, Francis Seymour, Aaron J.R. Connor, and Edward Roland (Floyd, 1999; Southern, 1982). Other sources, such as brief newspaper articles in the *Fresno Be ("Museum," 2001)*, indicate that Frank Johnson took a fifty piece military band (Third Company of Washington Guards) to Europe, rather than the small ensemble of musicians mentioned previously ("Museum," 2001; Harley, 1995).

   Although I have been unable to confirm which accounts are more accurate, it may be speculated that Mr. Johnson took a smaller group of musicians on this European tour, instead of a much larger ensemble. I have come to this conclusion because there are two separate sources (Floyd, 1999 and Southern, 1982) which identify the names of the musicians who participated in Johnson's ensemble for the European tour, and I have only located one source, the *Fresno Bee* article mentioned earlier, which claims that this group was a full military band (Floyd, 1999; Southern, 1982; "Museum," 2001).

   Sharon Harley's book, *The Timetables of African-American History*, also briefly mentions Frank Johnson's European tour, but fails to specify the size and type of music ensemble that made this trip. Harley simply refers to the organization as "his band," and provides little additional specific information about the ensemble (Harley, 1995).

   Although questions remain as to the exact size of the ensemble, there is little doubt that Frank Johnson and an ensemble of musicians performed in Europe in 1837. During this European tour, the ensemble gave a command performance for Queen Victoria. After this performance, it has been reported that Queen Victoria presented Frank Johnson with a silver bugle (Southern, 1982; Harley, 1995).

   Prior to Frank Johnson's emergence as an important military musician and composer, African-American musicians had participated in the American Revolution. Some of the earliest African-American military musicians were Scipio Brown (Colonel Christopher Green's and Jeremiah Olney's Black Rhode Island Regiment), Simeon Crossman (unknown regiment from Trauton, Massachusetts), Jabez (Jazeb) Jolly (Captain John Russell's Company, Fourteenth Massachusetts Regiment), William Nickens (Virginia Company), and Nimrod Perkins (The Diligence and Accomac Naval Vessels). These men all served as military drummers during the American Revolution (Jones, 1978; Harley, 1995; Southern, 1982 Other African-American military musicians who performed during the American Revolution were fifers Richard Cozzens, Barzillai Lew, and Cyrus Tiffany (Jones, 1978; Southern, 1982). Barzillai Lew was a member of Captain John Ford's Company of the Twenty-Seventh Regiment of Massachusetts in 1775 at the Battle of Bunker Hill (Harley, 1995; Southern, 1982; Jones, 1978; "Museum," 2001).

   African-American military musicians also participated in other important wars in America's history. Jordan Noble, a veteran of four wars, served as a drummer boy in the Seventh Regiment of Andrew Jackson's forces in the War of 1812, and was active at the Battle of New Orleans (Southern, 1982; Jones, 1978; Harley, 1995). Noble also took part, as a musician, in the Seminole War (1836), Mexican War (1848), and the Civil War (1863) (Southern, 1982). Jordan Noble was known as the "matchless drummer," but the origins of this nickname remain undetermined (Jones, 1978; Southern, 1982; Harley, 1995). Although the origin of Mr. Noble's nickname is uncertain, it may be speculated that it refers to his performance ability.

   Other notable early African-American military musicians were George Brown (bugler) War of 1812, Jessie Wall (fifer) War of 1812, John Conter (fifer) Thirteenth Infantry, Fourth Regiment during the Mexican War, James Clark (fifer) Twenty-Eighth Georgia Regiment of the Confederate Army during the Civil War, and Joseph G. Anderson (Southern, 1982; Harley, 1995; Jones, 1978).

   Joseph G. Anderson was a member of Frank Johnson's musical groups. When Johnson died in 1844, Anderson took over leadership of the musical organizations, which consisted of a military

band and a dance orchestra (Southern, 1982; Harley, 1995). During the Civil War, Anderson was employed by the government to train brass bands for African-American regiments that were stationed at Camp William Penn in Pennsylvania (Southern, 1982).

Early African-American Military Bandmasters

Although there are some instances of African-American musicians who served as leaders of musical organizations in the military, it was not until the very late nineteenth and early twentieth centuries that African-American musicians began to receive commissions as bandmasters of military bands.

One of the earliest examples is Lt. Col. Walter H. Loving. In September of 1899, he was assigned as Chief Musician (bandmaster) to the Forty-Eighth Regiment of the United States Volunteer Infantry, and served as bandmaster until June 1901 (Southern, 1997; Southern, 1982; Richardson, 1982). In September of 1901, Loving was commissioned to organize a band for the Philippine government by William H. Taft, who was Governor-General of the Philippines at the time. This band became known as the Philippine Constabulary Band (Richardson, 1982; Southern, 1997; Southern, 1982; Powell, 2001).

According to Richardson, the Philippine Constabulary Band consisted entirely of Filipino musicians (Richardson, 1982). However, I have discovered another source which refutes Richardson's article, *The Filipino-American Phenomenon,"* in which Richardson claims that the Constabulary Band was composed of Filipino musicians. According to the brief *Fresno Bee* article, the Constabulary Band was an all-African-American ensemble ("Museum," 2001).

After reading Richardson's article about Walter Loving and the Philippine Constabulary Band, I have concluded that this group was not African-American, but was mainly composed of Filipino musicians. I reached this conclusion because Richardson's article also includes photographs of the Philippine Constabulary Band. Although it is possible that a few African-American musicians may have been members of the Philippine Constabulary Band, an examination of the photo indicates that the majority of the musicians were Filipino.

Regardless of the ethnicity of the band's musicians, the Philippine Constabulary Band became a very popular ensemble with audiences throughout the Philippines, as well as the United States. The Philippine Constabulary Band, under the leadership of Walter Loving, made four trips to the United States in 1904, 1909, 1915, and 1939. During these American tours, the band performed at the 1904 Louisiana Purchase Exposition in St. Louis, Missouri, the 1909 Alaska Yukon Exposition in Seattle, Washington, the 1915 Panama-Pacific International Exposition in San Francisco, California and the 1939 World's Fair in San Francisco, California (Richardson, 1982; Southern, 1982; Southern, 1997).

John Philip Sousa had an opportunity to hear the Philippine Constabulary Band at the Louisiana Purchase Exposition in St. Louis, Missouri in 1904, and again at the Panama-Pacific International Exposition in San Francisco, California in 1915 (Richardson, 1982). It has been reported that Sousa said "The Constabulary Band is easily the best band at the exposition" (Richardson, 1982). Sousa's quote was in reference to the Constabulary Band's performance at the 1915 Exposition in San Francisco, California.

John Philip Sousa also got an opportunity to conduct the Philippine Constabulary Band in a performance of his march "The Stars and Stripes Forever" at the 1915 Panama Pacific International Exposition in San Francisco, California. Sousa reportedly said, "When I closed my eyes, I thought it was the United States Marine Band" (Richardson, 1982).

Prior to the Philippine Constabulary Band's successful performances at the 1915 exposition in San Francisco, California, Mr. Loving became interested in having the band also perform as an orchestra. During the Constabulary Band's first American tour in 1904, Mr. Loving had the opportunity to hear the Victor Herbert Orchestra and the German Symphony Orchestra perform in St. Louis, Missouri. As early as 1905, Loving began to equip the band with string instruments, as well as train the musicians to double as both a band and a symphony orchestra (Richardson, 1982).

Among the Philippine Constabulary Band/Orchestra's many accomplishments was its participation in the 1909 Presidential Inauguration. In January of 1909, the Constabulary Band led the inaugural parade for President William Howard Taft. The honor of leading the Presidential Inaugural Parade had traditionally belonged to the United States Marine Band (Richardson, 1982).

After the Presidential Inaugural Parade, the Philippine Constabulary Band received an invitation to play at Mrs. Taft's first White House reception, where it played in alternation with the United States Marine Band. According to Richardson's article, this was the first time in history that a band from outside the United States mainland played at a White House Inaugural reception and it was most certainly the first led by an African-American (Richardson, 1982).

In addition to the Philippine Constabulary Band's performances at the 1909 Presidential Inaugural celebration, the Constabulary Orchestra also participated in the festivities. The Philippine Constabulary Orchestra was invited to play at the Presidential Inaugural Ball where it too played in alternation with the United States Marine Orchestra (Richardson, 1982).

The performances of the Philippine Constabulary Band/Orchestra at the 1909 Presidential Inauguration represented several firsts for any non-American musical organization. For instance, the Philippine Constabulary Band/Orchestra was the first non-American band to lead a Presidential Inaugural Parade, and the first non-American orchestra to play at the White House for an official dinner. The Philippine Constabulary Band was also the first band to perform in the American Luneta, which was the new bandstand in Washington D.C. (Richardson, 1982).

Several years after Lt. Col. Walter Loving's appointments as Chief Musician of the Forty-Eighth Regiment of the United States Volunteer Infantry in 1899 and his initial year of service with the Philippine Constabulary Band in 1901, other African-American musicians began to receive opportunities to become Chief Musicians (bandmasters) of military bands in the United States.

In 1908, by special order of President Theodore Roosevelt, the United States Army began to commission African-American bandmasters for its four African-American regimental bands ("CIS Index," 1987; Southern, 1997; Southern, 1982; Harley, 1995). For the first time in history, an official policy was approved which allowed African-American bandmasters to lead African-American bands in the United States Army (Southern, 1982). This is significant because the United States Army was segregated at the time, and prior to the passage of this policy, the four African-American regimental bands were traditionally led by white bandmasters.

However, I have uncovered other sources that indicate that two of the African-American regimental bands may have had an African-American bandmaster prior to President Roosevelt's order. According to Anthony Powell, historian and author, Elbert Williams served as bandmaster of the Tenth Cavalry from 1901 to 1902 and the Twenty-Fifth Infantry from 1904 to 1909 (Powell, 2001).

The possibility of Elbert Williams having served as bandmaster in the United States Army prior to President Roosevelt's order is further supported by an article in a 1909 issue of the *Indianapolis Freeman*. This article mainly discusses Wade H. Hammond's (another African-American bandmaster) then recent appointment as Chief Musician of the Ninth Cavalry, but it makes reference to Elbert Williams serving in a similar capacity prior to the president's order ("Negro", 1909).

The source that Anthony Powell sent me which indicates that Elbert Williams may have been the first African-American bandmaster in the United States Army also seems to contain other contradictory information. In this source, Mr. Powell lists the names of white army bandmasters of African-American regiments from 1869 to 1908. He identifies George Tyrell (white) as bandmaster of the Tenth Cavalry from 1898 to 1902. Later in this same source Elbert Williams is listed as the bandmaster of the Tenth Cavalry from 1901 to 1902 (Powell, 2001).

There is another contradiction in Mr. Powell's source involving Elbert Williams and another white bandmaster. John N. Norton (white) is identified as the bandmaster of the Twenty-Fifth Infantry Band from 1904 to 1909, while Elbert Williams is also listed as the bandmaster of the Twenty-Fifth Infantry from 1904 to 1909 (Powell, 2001).

The issue of whether or not Elbert Williams was actually the first African-American to serve as bandmaster in the United States Army remains undetermined. One might consult official military documents and records to conclusively resolve this matter.

The decision to allow African-Americans to serve as bandmasters of the regimental bands of the African-American troops, opened the door for other prominent early twentieth century African-American military bandmasters, such as James T. Brymn of the Three Hundred Fiftieth Field Artillery Regimental Band during World War I, who was identified as one of the African-American bandmasters who introduced jazz into France (Southern, 1982; Grout and Palisca, 2001); and James Reese Europe, who organized a band for the United States Fifteenth Infantry (nicknamed the "Hell Fighters") in 1917. Europe was also instrumental in introducing jazz music to France (Southern, 1982; Grout and Palisca, 2001; Floyd, 1999).

Francis Mikell, who assumed leadership of the Three Hundred Sixty-Ninth Infantry Band (the old Fifteenth Infantry) in 1922 a few years after James Europe's death (Southern, 1982), George Dulf of the Three Hundred Seventieth Infantry (nicknamed "Black Devils") during World War I (Southern, 1982), Frederick W. Simpson of the Fifteenth Regiment of the United States Army in 1917 (Southern, 1982), and Egbert Thompson of the Fifteenth Infantry (later the Three Hundred Sixty-Ninth Infantry) during World War I (Southern, 1982), were all among the earliest African-American military bandmasters.

Other African-American army bandmasters between 1908 and 1945 were Wade H. Hammond (Ninth Cavalry 1908-1922), George A. Williams (Ninth Cavalry 1922-1928), John A. Clarke (Ninth Cavalry 1928-1944), Alfred J. Thomas (Tenth Cavalry 1908-1917), William H. Lewis (Tenth Cavalry 1917-1920), Harry H. Hollowell (Tenth Cavalry 1940-1944), William Polk (Twenty-Fourth Infantry 1909-1913), Kenny Smith (Twenty-Fourth Infantry 1913-1916), Thomas Green (Twenty-Fourth Infantry 1916-1917 and 1919-1922), William Warren (Twenty-Fourth Infantry 1917-1919), Slone Williams, Jr. (Twenty-Fourth Infantry 1940-1944), Elbert Williams (Twenty-Fifth Infantry 1904-1909), Leslie V. King (Twenty-Fifth Infantry 1911-1930's), and Jesse J. Stanbrough (Twenty-Fifth Infantry 1940-1945) (Powell, 2001).

Although the United States Army had begun to commission African-American musicians to serve as bandmasters of its four African-American regimental bands in 1908, the United States Navy did not appoint its first African-American bandmaster until 1917. On June 2 of that year, Alton Augustus Adams was appointed Chief Musician and the first African-American bandmaster in United States Navy history (Floyd, 1977; Floyd, 1999; Southern, 1997; Southern, 1982; Harley, 1995).

In addition to becoming the United States Navy's first African-American bandmaster, Alton Augustus Adams later became the first African-American bandmaster of a racially integrated unit in the United States Navy. In 1942, Mr. Adams was sent to Guantanamo Bay, Cuba to assume leadership of a twenty-six piece, all-white band that was stationed on the island (Floyd, 1999; Floyd,

1977). At this time it is uncertain whether or not this was the first time in history an African-American was appointed Chief Musician of an all-white military band.

According to Samuel A. Floyd's article *"Alton Augustus Adams: The First Black Bandmaster in the U.S. Navy,"* shortly after Mr. Adams arrived in Cuba, he requested that eight of his former bandsmen, who were African-American, be allowed to join this all-white band to which he was assigned, thereby making the band an integrated organization (Floyd, 1977; Floyd, 1999). Justification for the Study of African-American Military Musicians

The accomplishments of Alton Adams and the other African-American military musicians mentioned earlier in this paper is evidence that there are plenty of potential topics for new or additional studies in this area. The purpose of this paper is to explore the existent sources regarding early African-American military musicians with the intention of determining topics for further research. It is my hope that this paper will inspire other researchers to conduct more studies on early African-American military musicians.

To further justify the need for this type of research, I decided to do an informal comparison between eight white bandmasters and twelve African-American bandmasters of the late nineteenth and early twentieth centuries. I wanted to see which names would produce the most published literature by using standard research procedures.

The white bandmasters I used were John Philip Sousa (1854-1932), Patrick Sarsfield Gilmore (1829-1892), Henry Fillmore (1881-1956), Karl King (1891-1971), Edwin Franko Goldman (1878-1956), Richard Franko Goldman (1910-1980), Arthur Pryor (1870-1942), and John J. Richards (1878-1956). The names of these bandmasters are those chosen by Robert M. Gifford, (1996) *"The American march: The development of a genre from the eighteenth century to the present."*

Arthur Pryor, Edwin Franko Goldman and Richard Franko Goldman were the only bandmasters not mentioned in Gifford's article. Their names appear in three separate publications: Judith A. Anderson's *Edwin Franko Goldman: His life and role in the American Bandmasters Association*; Patrick Gail Stock's *Richard Franko Goldman and the Goldman Band*; and Daniel E. Frizane's *Arthur Pryor (1870-1942): American Trombonist, bandmaster, composer*.

The African-American bandmasters I used were Walter Loving (1872-1945), Wade Hammond (1879-1957), Elbert Williams, William Polk, Alfred Jack Thomas (1884-1962), James T. Brymn (1881-1946), Alton A. Adams (1889-1987), James R. Europe (1881-1919), George Dulf (1872-1943), Francis Mikell (1885-1922), Fred Simpson (1872-1940's), and Nathaniel Clark Smith (1877-1934). These bandmasters were listed in Southern's *Biographical Dictionary of Afro American and African Musicians*.

I began my comparison by looking for all of the names in *The New Grove Dictionary of Music and Musicians (2001), sixth edition*. All of the white bandmasters with the exception of John J. Richards and Arthur Pryor had article entries. On the other hand, I found only three African-American bandmasters in *The New Grove Dictionary*. They were Alton Adams, James Reese Europe, and Nathaniel Clark Smith.

Library searches revealed various sources for all of the white bandmasters except for John J. Richards. Sousa led the way with seventeen titles, Gilmore had two, Pryor had three, Edwin Franko Goldman had four, Richard Franko Goldman had eight, Henry Fillmore had one, and Karl King also had one. The only African-American name that produced any sources was James Reese Europe. There were four sources under his name.

Repertoire International de Litterature Musicale (RILM) searches yielded sources for all of the white bandmasters. Sousa had sixty-five, Gilmore had eleven, Fillmore had seven, King had one, Edwin Franko Goldman had six, Richard Franko Goldman had six, Pryor had four, and Richards had one. Only five of the African-American names produced any titles under the RILM search: James

Europe with seventeen, Walter Loving with one, Alfred Jack Thomas with one, Alton Adams with two, and Nathaniel Clark Smith with one.

A *Google* online search, chosen as representative of the common research search engines, also provided information on all of the white bandmasters. John J. Richards was the only name that produced simply one page with just a few entries. Most of the information found on Richards dealt with sound recordings of his compositions. I found very little biographical material pertaining to John J. Richards during my *Google* search. The rest of the white bandmasters each had at least three full pages of material, which included some biographical information.

Google produced information on seven of the African-American bandmasters. James Europe had more than three pages of extensive information. Loving and Adams each had one page with eight entries, and Nathaniel Clark Smith had one page with two entries. I also found two titles for Elbert Williams, but very little of this information was biographical. His name appeared in a very short article about the Twenty-Fifth Infantry's band, and a roster list of soldiers who served with the Twenty-Fifth Infantry.

James T. Brymn's name produced three pages of results, but again very little of this information was biographical. George Dulf's name produced a couple of titles. One of these articles was a biography that briefly discussed Dulf's career and contributions. However, Wade Hammond and the rest of the African-American names (William Polk, Alfred Jack Thomas, Fred Simpson, and Francis Mikell) produced no titles during the Google search.

Conclusions

As a result of this informal comparison, I have concluded that there is more literature on white American bandmasters of the late nineteenth and early twentieth centuries, than there is on African-American bandmasters of the same period. The names of white bandmasters produced much more information through the use of basic research procedures. It is easier to find material on some of the white bandmasters than it is for most of the African-American bandmasters.

Some of the African-American names, such as Alton Adams, James Europe, and Nathaniel Clark Smith, consistently produced results. A few others (James T. Brymn, George Dulf, Walter Loving, Alfred Jack Thomas, and Elbert Williams) produced limited results, while others (Wade Hammond, William Polk, Fred Simpson, and Francis Mikell) produced none at all. It should be noted that even when information was available about a specific African-American name, that information was usually limited to an intriguing mention rather than any kind of expanded information. This kind of comparison indicates that there needs to be more research done in the area of African-American bandmasters of the late nineteenth and early twentieth centuries.

It is my hope that this paper on African-American military musicians will lead to other detailed studies of the lesser-known early African-American military musicians and bandmasters, such as Francis Mikell, William Polk, Elbert Williams, and Egbert Thompson. Perhaps studies of this type will inspire others to expand the area of research from African-American military bandmasters to other closely related topics. For example, there could be more extensive research on African-American military musicians and musical organizations of the American Revolution and Civil War eras.

Such research does not have to be limited to military musicians. During the preparation of my study on Wade Hammond, (Johnson, 2004), I learned that there have been many African-American civic bands, orchestras and brass bands in America throughout the late eighteenth, nineteenth, and early twentieth centuries. There could be detailed studies of these musical organizations, as well as their African-American leaders.

My research might also inspire others to conduct more detailed studies of women's roles in the early history of American bands. There could possibly be studies of the earliest female bandmasters and the earliest all-female bands and musical organizations.

In conclusion, I hope that my paper on early African-American military musicians will encourage future researchers to pursue some of the topics mentioned earlier, as well as other similar topics. By conducting more studies of this nature, we can enrich and further enhance our existing body of knowledge concerning American band history.

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Comparing Holistic and Phrase-by-Phrase Methods of Teaching Songs to Young Children

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Singing has long been recognized as an important aspect of the music curriculum in elementary schools. Research on children's singing is extensive and includes studies such as vocal range, pitch patterns, tonal memory, and male versus female vocal models (Flowers & Dunne-Sousa, 1989; Goetze, Cooper, & Brown, 1990). Given the universal nature of singing, a surprising lack of research has been conducted to investigate the effect of specific teaching procedure on song acquisition and vocal accuracy.

One method of teaching songs is to ask children to echo short "chunks" or phrases of the song. Research in cognition suggests that learners organize new information such as language or music into groups or chunks rather than as a complete whole (Mandler, 1967; Miller, 1956). Elementary music teachers have traditionally tended to break a song into fragments or "sound bites" before connecting the pieces into a whole song. The "phrase-by-phrase" or "repeated phrase" method is described by college methods textbooks (Harrison, 1983; Herrold, 1991; Campbell & Scott-Kassner, 2002) although no research is cited to support their discussions.

A second method of teaching songs is a "holistic" or "whole-song method" (Rozmajzl & Boyer-White, 1992). The teacher sings the song to the children in its entirety several times rather than breaking up the song into fragments (Feierabend, 1995). This type of song transmission is also sometimes referred to as "immersion" in more informal music-making situations that are often found in song teaching and learning on the playground (Harwood, 1987).

Many teachers utilize a combination of both the phrase-by-phrase and the holistic approach. Bergethon, Boardman, and Montgomery (1997) encourage teachers to teach a song in its entirety, but isolating successive phrases may be necessary "if the song is long or complex." The holistic approach seems to be preferred for giving children a "musical experience" and allowing them to "develop a total feeling for the music instead of a fragmented one" (Harrison, 1983). This same author, however, recommends the phrase-by-phrase method of teaching for a song to be "taught in a short period of time." Hackett and Lindeman (2004) also support using both holistic and phrase-by-phrase approaches. Although both methods are historically well established, no research is cited in these textbooks to support teaching songs using either pedagogy.

Several recent studies have examined methods used to teach songs. Persellin, Smith, Klein, and Taguiam (2002) conducted a study in which 197 kindergartners were placed in one of three groups

and were taught either by: 1) always singing along with the teacher; 2) always echoing the teacher; or 3) doing both as the teacher deemed appropriate. After three months of treatment, post-test results indicated that teaching method had no significant effect on vocal accuracy.

Klinger, Campbell, and Goolsby (1998) compared the holistic approach to a phrase-by-phrase technique. Second graders were taught two, similar folksongs written in a *Do* tetratonic scale (*Do, Re, Mi, Sol*). Songs were taught to the first class by singing one song in its entirety (holistic) and the second song by using the phrase-by-phrase technique. In the second class, songs were taught using the reverse procedure. Students' individual performances were recorded one week later. Children made significantly fewer errors in songs taught to them through the holistic method. The authors suggested that repeated exposure to a song in its entirety offered a greater sense of continuity and integrity of a song's melody and story line. Thus, children's recall in performance was enhanced.

Barnes (1999) conducted a modified replication of the Klinger *et al* (1998) study using the same songs, but a slightly different phrase-by-phrase technique. She also found that the holistic method produced more accurate results with second graders.

Gault (2002) conducted a similar study using these same songs. He extended the study by comparing not only a holistic teaching approach to a phrase-by-phrase approach, but also the presence or absence of text and musical aptitude. His results, however, differed from Klinger *et al* (1998) and Barnes (1999). After four weeks of instruction, he found that kindergartners and first graders sang one of the songs more accurately using the phrase-by-phrase procedure, but not the other song. Gault suggested that teaching method is dependent upon the song to be taught. His findings, however, appeared to be related to teaching with or without song text rather than the teaching procedure.

The purpose of our present study was to compare the effectiveness of two song-teaching methods, holistic and phrase-by-phrase. We modified the original study of Klinger *et al* (1998) by using new songs, working with first graders rather than second graders, and extending the treatment to three days rather than one.

Method

Thirty-two first-grade children ($N = 32$) from two randomly selected intact music classes in an urban elementary school participated in this study. The subjects were first graders in the present study in order to extend the learning on acquisition of songs with children younger than second grade. The first author taught the subjects two folksongs using the script published by Klinger *et al* (1998). Using a script was important to assure that children heard and sang the songs an equal number of times during the treatment phase.

The first class ($n = 16$) was taught "Great Big House" through the phrase-by-phrase method and "Little Liza Jane" was presented through the holistic method. The second class ($n = 16$) was taught the same songs using the reverse teaching procedure. These songs were selected in order to avoid the interval of the descending fifth and to include the scale degree *La*. The songs in the present study have simple rhythm patterns, are in the form of ABAC, and are written in a range of a sixth in *Do* pentatonic (*Do, Re, Mi, Sol, La*) starting on the third scale degree *Mi*. In the Klinger *et al* (1998) study, the songs were written within a range of a fifth, did not include *La*, and the initial pitch of each song was not the same. Due to the younger age of the children, more time was given to learn these songs than those in the Klinger *et al* (1998) study. The first author of this study taught both songs *a cappella* during three class periods while following the script. The songs were reviewed the

following week before testing. Subsequently, each child was individually recorded performing both songs in a quiet room.

Tapes were transcribed and analyzed for vocal accuracy. Errors in the recorded songs were scored in each four-measure phrase by the authors in four categories: melodic contour, rhythmic accuracy, text, and pitch. One point was deducted for each error. Agreement between the two judges for the total number of errors was $r = .97$, an acceptable level of reliability.

Results

Comparisons were made using an analysis of variance for differences between classes, songs, and types of errors. Results indicated that the methods used to teach children the songs had no significant effect on the vocal accuracy. Accuracy of text, melodic contour, rhythm, and pitch were not affected by either of these teaching methods. In addition, neither song was sung more accurately than the other song regardless of method used.

Figure 1 shows that while children sang the songs using the holistic method with fewer errors than with the phrase-by-phrase method, this difference was not significant. The first phrase of each song was more accurate than subsequent phrases, but, again, these differences were not significant.

FIGURE 1: PERCENTAGE OF TOTAL POSSIBLE ERRORS
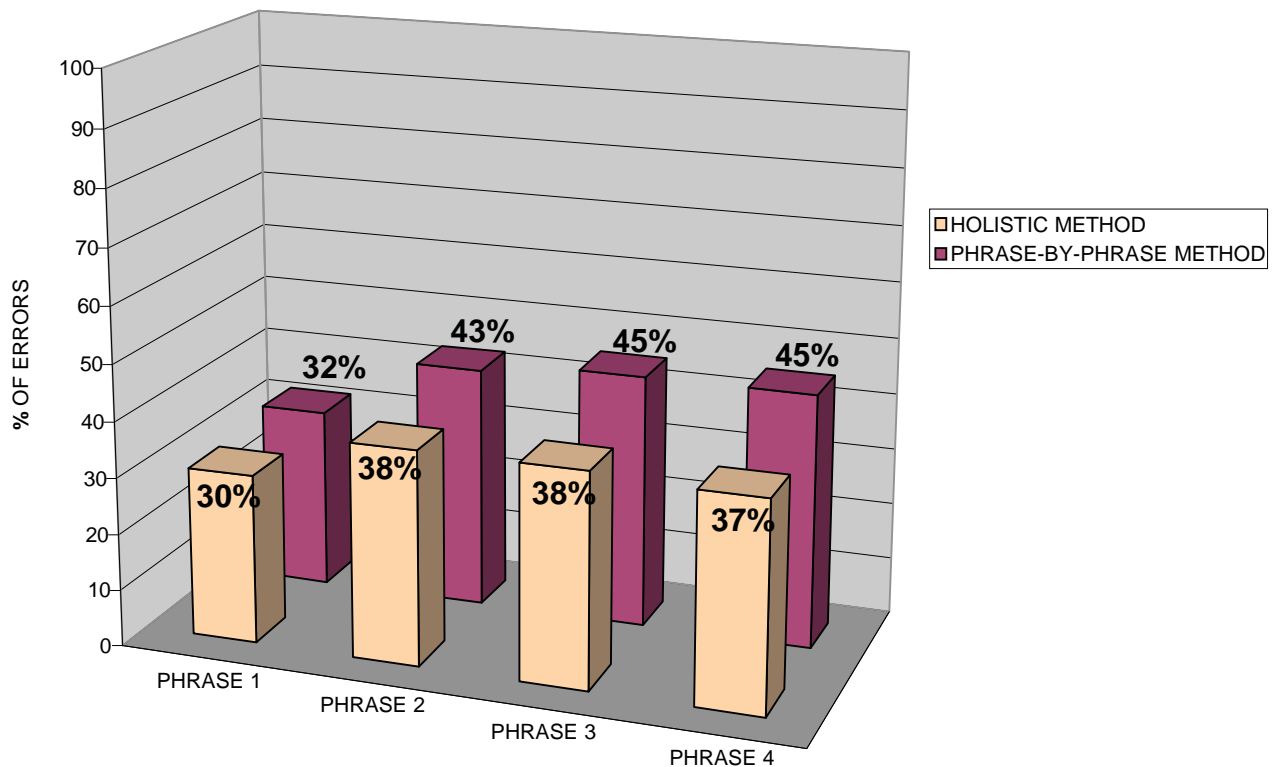
Of the four categories quantified, rhythmic accuracy, regardless of treatment, was the most accurate (Figure 2). The percentage of total rhythmic errors was 15% for the holistic method and 22% for the phrase-by phrase method. This was followed by text (21% and 28%) and melodic contour (55% and 57%). The most errors reported were in pitch (67% for each).

FIGURE 2 : PERCENTAGE OF ERRORS CLASSIFIED BY TYPE
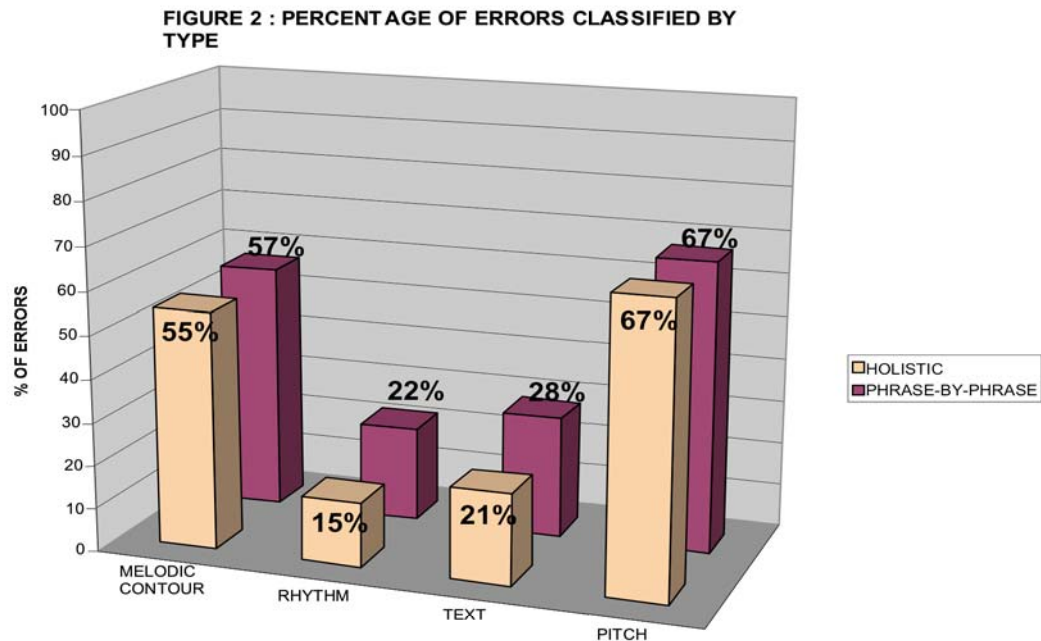
A regression analysis was calculated to determine the strongest predictor of accuracy. Rhythmic accuracy, which explained 87% of the variance in errors, was found to be the strongest predictor of overall accuracy followed by text, melodic contour, rhythm, and pitch. The second strongest predictor of accuracy was total pitch accuracy.

Discussion

Subjects in this study were first graders rather than second graders as in the Klinger *et al* (1998) study. While the folksongs were not difficult, three treatment periods over the span of one week may not have been enough time to adequately learn two new songs for these developing singers. Some of the children were chanting the songs in the range of their speaking voice (Trollinger, 2003). As anticipated in some developing singers, in order to sing higher pitches (A and B in the middle of the staff) they modulated to a lower key, some several times, throughout the duration of the songs in order to fit the song to their lower speaking ranges. Even songs pitched within a sixth (D – B) may have been too difficult for these children.

Klinger *et al* (1998) did not report children modulating to a new key whenever a song required a pitch higher or lower than their range limitations. Campbell confirmed that the practice of modulating was not found in their study with the older second-graders (personal communication, November 1, 2003). On the other hand, other studies have found 3- to 5-year-olds to frequently be modulating singers (Flowers & Dunne-Sousa, 1990; Ramsay, 1983). Wassum (1980) found that first

graders showed some modest success in maintaining the tonality of a song. At the beginning of the school year, maintaining a sense of tonality throughout a song was a developing skill with these first graders in the present study.

Rhythmic accuracy proved to be more accurate than text, melodic contour, or pitch. In fact, the strongest predictor of accuracy of text, pitch, and rhythms was rhythmic accuracy. This confirms some of the findings of Davidson, McKernon, and Gardner (1991) who suggested that young children acquire songs by first learning the rhythms and words, then pitch contour and interval accuracy, and finally key stability.

The first phrases of each of the two songs were found to be more accurate than the other phrases. Klinger *et al* (1998) also found the first phrases of their songs to be the less challenging to learn and retain. This may be a function of children's memory of the initial phrase. It could also be due to the tester singing the first two beats of the song to establish the pitch and tonality before inviting the child to sing it in its entirety.

Singing plays an integral role in many elementary general music programs. Few studies, however, have been conducted on what many elementary music educators consider to be common practice when teaching songs. More research and replications of original studies are needed to determine which pedagogical approaches are the most successful with children.

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The Effect of Personal and Situational Influences in the Attrition and Retention of Music Educators

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One of the most critical challenges facing the field of education today is the retention of qualified teachers. The teacher shortage, coupled with the high rate of attrition, is an epidemic that plagues all areas of education in the United States (Conway, Krueger, Robinson, Haack & Smith, 2002). According to the United States Department of Education, as many as 2.7 million new teachers will be needed in public schools by 2009 (Henke, Choy, Geis & Broughman, 1996). The critical shortage of teachers in American schools over the past two decades has led to a substantial body of literature focused on teacher attrition (Ingersoll, 2001b).

Traditionally, the entire teaching profession has experienced high rates of turnover and substantial attrition (Heyns, 1988). Schlechty and Vance (1983) determined that 40 to 50 percent of beginning teachers leave the profession during their first seven years of teaching. Ingersoll (2001a) uses the metaphor of pouring water into a bucket with a hole to describe the problem of hiring a sufficient number of teachers for America's classrooms.

What impact does the high rate of teacher attrition have on schools? Ingersoll (2001b) characterizes the teacher turnover as being a "revolving door" whereby teachers enter the profession and shortly thereafter leave in large numbers. This increases demand for new teachers and creates staffing problems that can cause disruption in program planning and continuity, impede student learning, and lead to higher expenditures by school districts on recruiting and hiring (Shen, 1997).

In order to develop an intervention to retain qualified teachers it is necessary to first examine the causes of attrition. Ingersoll (2001b) indicates that two of the primary reasons teachers are leaving the profession are inadequate support from school administration and problems dealing with student discipline. A positive correlation between teacher retention and administrative support was further verified by a study conducted by the National Center of Educational Statistics in which inadequate administrative support was the most common reason cited for leaving the teaching profession (Natale, 1993). Research of administrative assistance offered to beginning teachers in Oregon determined that school administrators reported that they offered more assistance than the beginning teachers reported they received; and the teachers described the support as being "ceremonial and ritualistic" (Myton, 1984 in DeLorenzo, 1992, p. 11). In terms of retaining beginning teachers, administrators can have an impact on attrition by "shaping the tone and quality of a new teacher's first teaching experience" (Chapman, 1984, p. 655).

Student discipline is an additional reason teachers leave the profession. Research confirms that beginning teachers in elementary through secondary schools, both in the United States and abroad, consistently name classroom discipline as their greatest challenge (Veenman, 1984; Madsen & Madsen, 1998).

The field of music education is unique, however, and requires a more discipline-based investigation. Madsen and Hancock (2002) point out that "although these [general education] findings suggest relationships transferable to an investigation of music educators, the reinforcing nature of music, idiosyncratic teacher prerequisites, and unique demands placed on the in-service music teacher (e.g., performances) obfuscate generalization" (p. 8). Thus, the examination of discipline-based research relative to music education is necessary.

The teaching shortage is felt acutely in the field of music education, with the demand for music teachers rising, while the number of students training to become music teachers is declining (Asmus, 1999). A recent research report published by the Music Educators National Conference (MENC) (Hill, 2003) states that each year in the United States approximately 11,000 new music teachers are needed to replace those who leave; however, only about 5, 500 new music educators join the profession each year. Further, music teacher attrition can create serious problems for music education in schools because continuity of teaching personnel is key to developing quality music programs (Krueger, 2000). To compound the problem, at current staffing levels, between 9 and 27 million students in the United States do not receive an adequate music education, as defined by MENC, the primary professional organization in the field.

Administrative support is an issue that concerns music educators, as well. Madsen and Hancock (2002) found that beginning music teachers expressed a number of concerns regarding administrative support. These issues included "differing understandings of the importance of music education, a perception of music as an extracurricular activity, challenges to the content of instruction, apathy for music education, music valued solely for utilitarian purposes, and music classes used as a respite for 'academic' teachers" (p. 15).

In one of the few studies conducted regarding music teacher attrition, DeLorenzo (1992) found that beginning music teachers wanted administrators who were accessible, encouraging, and supportive. As one respondent remarked, you should "have an open invitation to sit down and discuss problems without feeling you are taking valuable time from them or that you are chasing them down for answers" (p. 21).

In an effort to examine the possible causes of music educator attrition, the present investigation was designed to explore factors which might provide additional insight into the differentiation of music educators who indicate intent to remain in the profession from those who decide to leave the profession.

Method

Subjects consisted of self-identified new members of Texas Music Education Association (TMEA). In 1999, in an ongoing effort to identify, welcome and mentor new music educators, TMEA requested that new teachers or new-to-Texas teachers indicate this fact on their membership registrations. Secondary music educators are required to join TMEA if they wish to enter students in all-region and all-state events; however, membership is completely voluntary for elementary teachers (TMEA Constitution at tmea.org). Therefore the resulting data might be assumed to include more secondary and fewer elementary teachers than in the general population. The resulting 5 years of data were thus limited to self-identified and self-defined

first-year teachers or first-year-in-Texas teachers (*N*=852). Subjects consisted of self-identified new members of Texas Music Education Association (TMEA). In 1999, in an ongoing effort to identify, welcome and mentor new music educators, TMEA requested that new teachers or new-to-Texas teachers indicate this fact on their membership registrations. Secondary music educators are required to join TMEA if they wish to enter students in all-region and all-state events; however, membership is completely voluntary for elementary teachers (TMEA Constitution at tmea.org). Therefore the resulting data might be assumed to include more secondary and fewer elementary teachers than in the general population. The resulting 5 years of data were thus limited to self-identified and self-defined first-year teachers or first-year-in-Texas teachers (*N*=852).

E-mails were sent to the music educators inviting them to respond to a survey on the retention and attrition of music educators. Discarding 63 who indicated no e-mail, 15 duplicate addresses and 240 undeliverable e-mail addresses, the remaining pool consisted of 597 music educators who entered the profession or moved to Texas from March, 1999 to March, 2003. The surveys were solicited completely by e-mail and, following procedures established by Johnson and Stewart (2003), volunteer subjects logged onto an internet address to complete the online survey. It was hoped that using an online format would include a wider potential sampling, insure ease of response, be less expensive that the traditional mail-out survey, and perhaps draw a higher response rate. A reminder to participate in the survey was sent to each potential respondent three times during March-May, 2003. Surveys were completed by 223 subjects for a 37.35% return rate, which the researchers deemed sufficient for further analysis.

Survey questions were based on previous research from both music (Madsen & Hancock, 2002) and non-music sources (Chapman, 1984; Ingersoll, 2001b). The researchers developed the survey; four experienced music educators examined it for validity, made suggested changes, piloted both the questions and the e-mail process, made more revisions and arrived at the final version of the survey.[1]

Survey questions included Personal Characteristics (gender, age, race, marital status, spouse employment as a teacher, and number of children), Educational Experience (degree, certification, year of certification, quality of collegiate preparation [Madsen & Hancock, 2002], quality of pre-college preparation [Chapman, 1984; Madsen & Hancock, 2002]), and grade point average), and Teaching Venue (currently teaching, levels taught, areas taught, number of years taught, number of positions held [Madsen & Hancock, 2002], school size, school location [Ingersoll, 2001b], position, and number of campuses served). Respondents were asked if they planned to continue teaching, and, if not, to indicate their reasons for leaving. This question was considered the most important of the survey in our attempt to gain insight into why teachers consider leaving the music education profession.

Additional areas of interest included Mentoring and Professional Memberships. Based on previous literature supporting the value of mentoring in music classrooms (Conway, Krueger, Robinson, Haack, & Smith, 2002; Haack & Smith, 2000; Krueger, 1999), and the value of professional organizations in the retention of teachers (DeLorenzo, 1992), respondents were asked whether they were mentored as first year teachers and if not, how mentoring would have assisted them, the number of professional music organization memberships held, and how many conferences they attended annually.

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[1] The experimenters wish to thank the Texas Tech Teaching, Learning & Technology Center for their able assistance in putting the survey online.

Results

Results, based on 223 returned surveys, consisted of frequency of responses to each question on the survey. The Chi Square statistic was used throughout to analyze possible statistical differences in the frequency data; where appropriate, results are presented in terms of percentages for ease of comparison.

Overall, demographic data indicated that the survey sample consisted of significantly more females (X^2 [1,222] = 6.48 p <.01), and indicated significant differences in age (X^2 [3,222]=124.14, p <.0001), race (X^2 [3,222]=432.09, p <.0001), marital status (X^2 [2,220] = 99.51 p <.0001), number of spouses employed as teachers (X^2 [1,195] = 46.04 p <.0001), and number of children (X^2 [3,222] = 178.24 p <.0001).

The Educational Experience of the survey sample consisted of the majority (67%) holding bachelor's degrees and 91% holding music certification. Significantly more indicated a positive evaluation of both their college preparation (X^2 [4,220] = 125.27 p <.0001), and their pre-college preparation (X^2 [4,220] = 164.16 p <.0001).

Teaching Venue data indicated that 98% of the respondents were currently teaching, and among those 97% were teaching in public schools. There were significant differences by school location (X^2 [2,222] = 54.49 p <.0001), and grade levels taught (X^2 [4,247] = 186.64 p <.0001). Note that respondents could check more than one grade level. As expected, due to the TMEA membership requirement for secondary teachers, many more secondary than elementary teachers were represented.

A significant difference appeared among the area (band, orchestra, choir, elementary) currently teaching (X^2 [6,337] = 143.18 p <.0001). Again, note that teachers could check multiple areas. Thus 218 teachers currently teaching taught in 338 areas. Likewise significant differences were noted among number of certified teachers assigned to music (X^2 [2,222] = 4.99 p >.08). This question was asked to determine whether teaching in isolation (only certified music teacher on campus) might be a differentiating factor in the stay/leave decision.

Significant differences occurred in position held (head director, assistant, neither) (X^2 [2,222] = 11.69 p <.003), number of campuses taught (X^2 [3,222] = 203.21 p <.0001), years taught (X^2 [4,222] = 69.26 p <.0001), and number of positions held (X^2 [4,222] = 109.8 p <.0001).

Perhaps the most important question queried future teaching plans. Eighty percent of the respondents (*n*= 179) indicated they planned to stay in the profession while 20% indicated they planned to leave (*n*=39) or had left (*n*=5). In an effort to examine any differences between those electing to stay or leave the profession, chi square analyses were performed for each of the above categories by the stay/leave decision.

Significantly more Females (X^2[1,222]=5.17, p <.023) indicated that they would leave the profession. Females leaving = 75% of total leavers vs. 59% of total respondents. No other differences between Stayers and Leavers were significant. Thus there were no significant differences between Leavers and Stayers regarding teacher age, teacher race, marital status, whether spouse teaches, number of children, degree held, certification, quality of college or pre-college preparation, college grade point average, private or public school, urban, suburban or rural school, size of school, grade level taught, area taught (band, orchestra, choir, elementary), number of certified teachers in the music area, position held, number of campuses served, number of years taught, number of different positions held, professional organization memberships, number of conferences attended per year, or presence of a mentor. The

stereotypical teacher who works alone, does not have any support, does not attend conferences, fails to be mentored and finally drops out of teaching was not supported by these data.

Analysis of Those Intending to Leave

Those indicating plans to leave the music teaching profession (*n*=44) were asked to respond to reasons for leaving. Based on previous research indicating factors affecting the stay/leave decision, the survey included a checklist of possible reasons for leaving. Categories in the frequency order in which they were checked appear in the table below.   Note that the 201 comments were made by 44 persons (average number of comments = 4.02).

Table 1

Reasons for Leaving or Intending to Leave the Profession (n=44)

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	Checklist Responses (44 subjects checked 201 topics)	% of Subjects Checking Each Item	Free Response (12 subjects made 20 comments)	Would Return to Teaching if Specified Problems Were Solved (33 subjects made 40 comments) Would return = 39 Would not return = 5
Dissatisfaction with Administration				
Inadequate Administrative Support	17	39%	2	1
Lack of Influence over school policies	16	36%		
Lack of Parental/Community Support	13	30%		
Poor Pay	12	27%	2	5
Lack of Adequate Preparation Time	11	25%	2	
Poor Opportunities for Advancement	10	23%		
Lack of Adequate Budget	9	20%		1
Isolation	9	20%		
Multi-Campus Duties	4	9%		
Workload issues			4	2
Scheduling Issues			2	1
Change in Schools or Positions				5
Dissatisfaction with Students				
Lack of Student Motivation	18	41%		
Lack of Student Discipline	17	39%	1	3
Classes Too Large	7	16%		
Unsafe Environment	4	9%		1
Resign to Change/Enhance Career				
Pursue Other Music Career	14	32%		
Attend Graduate School in Music	7	16%	1	3
Pursue Career Outside of Music	6	14%	3	4
Retirement	1	2%	1	1
Resign for Personal Reasons				
Pregnancy/Child Care	7	16%		4
Other Family Problems	6	14%		
Moving	5	11%		
Health	2	5%	1	1
Job Stress				2
Resign for School Staffing Issues				
Reduction in Staff	3	7%		
Elimination of Programs	2	5%		
School Closing	1	2%		
Unique Individual Comments			1	6

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Checklist responses (See Table 1.) were counted and categorized into dissatisfaction with administration (*n*= 101), dissatisfaction with students (*n*=46), career enhancement opportunities (*n*=28), personal reasons (*n*=20) and school staffing issues (*n*=6). Statistical analyses (X^2 [3, 200] = 146.87 *p* <.0001) indicated significantly more comments regarding students and administration than any other category. Twelve subjects responded to the free-response section inviting other reasons for leaving. Their comments subjected to an item analysis and categorized by two independent researchers, echoed the checklist categorizations for the most part. Two new categories appeared that included workload issues (too busy with feeder schools; too many demands for one person, etc.) and scheduling challenges (problems with block scheduling, assigned to teach non-music classes, etc.).

The Leaving teachers were asked if they would consider returning to teaching. The vast majority (39 of the 44 Leavers) said that they would and listed the circumstances under which they would return in a free response format as indicated in Table 1. Again, independent analyses determined that the majority of the 33 responses were consistent with the concerns teachers had listed above.

Mentoring and Professional Membership

All 223 respondents were asked whether they had received formal or informal mentoring during the first years of their teaching experience. A significant number replied affirmatively (n=148, X^2 [1,222] = 24.0 *p* <.0001). There was no significant difference between the Stayers and Leavers regarding whether they had received mentoring (X^2 [1,221] = 0.17 *p* >.68).

Frequency of Yearly Attendance at Music Conferences revealed significant differences (X^2 [5,222] = 201.71 *p* <.0001) with the frequency of attendance from highest to lowest being two per year = 107, one per year = 57, three per year = 27, five or more per year = 14, four per year = 9 and zero conferences = 9. Remarkable was the very large number of teachers who attended conferences. There were, however, no significant differences between Stayers and Leavers in regards to conference membership or attendance (X^2 [4,222] = 3.71 *p* >.45).

Results may be summarized as follows:

1. Significantly more persons (80%) intended to stay in the profession than intended to leave; those intending to leave were 19.73% of the total respondents.
2. Significantly more women than men intended to leave the profession.
3. There were no significant differences between Leavers and Stayers regarding demographic information, quality of college or precollege preparation, teaching experience, teaching venue, number of years taught, number of positions held, membership in professional organizations or the presence of a mentor.
4. Reasons for leaving the profession included significantly more comments about lack of administrative support and dissatisfaction with student behavior than any other category.
5. Respondents indicated that 66% had been formally or informally mentored during their first years of teaching.
6. Ninety-six percent of respondents attended at least one conference annually.

Discussion

Teacher attrition does pose a problem to music education. This study indicates that 19.73% of the respondents, approximately one in five, intended to leave the teaching profession. This percentage is consistent with earlier research in the field of general education (Conway, Krueger, Robinson, Haack & Smith, 2002; Ingersoll, 2001b), as well as music education (DeLorenzo, 1992; Fallin & Royse, 1994; Madsen & Hancock, 2002). When this attrition rate is considered in combination with the increasing demand for new music educators and the decline in students training to become music teachers (Asmus, 1999; Hill, 2003), major deficits result.

In terms of gender, this study reveals that a significantly larger number of women than men intended to leave the profession. This finding is consistent with previous studies conducted surveying the general teaching population (Adams, 1996; Heyns, 1988; Ingersoll, 2001b; Murnane, Singer & Willett, 1988), as well as the field of music education (Madsen & Hancock, 2002). Perhaps childbearing issues that are unique to young female teachers can explain the difference in genders. Gender differences may also indicate expanding opportunities for women in careers other than teaching.

In an effort to determine any causal factors, the survey contained detailed questions concerning demographic information, quality of college or pre-college preparation, teaching experience, teaching venue, number of years taught, number of positions held, membership in professional organizations and the presence of a mentor. These data did not indicate any significant difference between the teachers staying and those leaving the profession. It might seem surprising, given the large number of factors listed, that no significant differences were found. Perhaps this suggests that causes of teacher attrition are idiosyncratic, cannot be generalized in accordance with personal or situational influences, or cannot be determined by means of a survey.

When respondents were asked to give reasons for leaving the teaching profession, a significant number of replies included lack of administrative support and problems with student discipline. These findings are in keeping with previous studies (Chapman, 1984; Chapman & Green, 1986; DeLorenzo, 1992; Ingersoll, 2001b; Krueger, 2000; Madsen & Hancock, 2002; Madsen & Madsen, 1998). These data suggested that perhaps an improvement in situational conditions, namely increased support from school administration and the reduction of student discipline problems, would diminish the rate of attrition. As one respondent stated: "The lack of enforced policies and weak administration are my main stress. I have had to learn to fully discipline myself because the administration is not harsh for most offenses that occur. Students get away with being rude, telling off teachers, and doing as they please because of weak administration." This statement also exemplifies the connection between administration support and student discipline.

A majority of respondents (66%) indicated that they had received mentoring during their first year of teaching. However, in this study, having a mentor did not have a significant effect on teacher retention. Although mentoring has received much support (Conway, Krueger, Robinson, Haack, & Smith, 2002; Haack & Smith, 2000; Krueger, 1999), there is a lack of research linking mentoring with a reduction in teacher attrition. The respondents were not asked to rate the quality of their mentoring experience; further research might do so. A number of respondents, both those who had and had not received mentoring, suggested ways to improve the mentoring process. One respondent suggested that a mentor could be useful to "teach me about the other

parts of teaching besides music, like paper work, deadlines for auditions, contests, etc., as well as inner-school policies and politics." Perhaps mentoring would play a more significant role in attrition if greater attention were given to the specific needs of the beginning teacher.

This study seems to substantiate the fact that teacher attrition among music educators in the state of Texas is a critical problem. Data suggest that the attrition rate could be diminished by increasing support from school administrators and by reducing the student discipline problems. While this study suggested that mentoring does not appear to be related to teacher attrition, perhaps further investigation might reveal the type of support provided by mentors that is most beneficial to new teachers, thus encouraging them to remain in teaching.

Of special interest is a comparison of the reasons for leaving the profession with what would have to change if the leaving teachers were to return. For example, poor salary is not a top priority (ranked number 7 out of 24 topics), but it ties with changing schools or positions as the top problem to be solved if teachers were to return. It is gratifying to note that the vast majority of Leavers (89%) indicated they would return to the profession. Perhaps further studies should explore whether teachers do indeed return after childcare issues have been solved or when offered a new position at a different school in (presumably) a better teaching situation. It should be remembered that this survey asked teachers' opinions, but had no way of verifying the willingness of teachers to act on those opinions. Thus further research tracking what music educators do throughout their careers (changes in positions, grade levels taught, returning after children are older, returning part-time, etc.) would be valuable information in determining attrition causality.

Because this study is limited to members of a single state professional organization, the results are indicative of a specific geographic region, and are not necessarily representative of the national population of music educators. Thus, the findings of this study should be generalized with caution. Also, note that Leavers in this study indicated an intent to leave the profession, yet no further data were collected to verify whether or not they left. However, because the results of this study are in keeping with the research conducted on the general teaching population of the United States, perhaps music education associations of other states might investigate similar issues. Clearly further research is indicated to address this crucial problem.

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Relationships Between Teaching Songs with Text or Without Text and Song-Learning Accuracy and Singing Skill

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Previous research has indicated that of all the activities that occur in the elementary music classroom, singing and song learning consume the most instructional time (Weinberg, 1988). A large amount of research has been undertaken to study various aspects of singing and song learning. Topics of research have included singing accuracy, singing ability, and improvement of singing skills. Furthermore, researchers have studied how people learn melodic patterns (Jarjisian, 1981; Sinor, 1984) and whole songs (Bush, 1985; Klinger, 1996; Weinberg, 1988). The process by which people learn songs is often termed "song acquisition."

Still another consideration in the song-learning process is the relationship between melody and text. Investigators over a number of years have studied how the use of text or no text affects song recognition, song learning, and song performance. On the subject of song recognition, Serafine, Crowder, and Repp, (1984) concluded that melody may be integrated with text in memory for songs, but text is not necessarily integrated with melody. Feierabend, Saunders, Holahan, and Getnick (1998) found that preschool-aged subjects recognize songs with text more readily than those without. The authors cautioned that the results did not apply to the effects of learning songs with or without text on singing skills. Results of a study by Shen (1999) involving recognition of folk songs in English and Chinese also indicated that text was an important factor in identifying previously-heard songs. Furthermore, adult subjects performed the recognition task better than second-graders. Concerning relationships between text and no text and song-learning accuracy, preschool-aged children sang a song learned without words more accurately than one learned with words in a study by Levinowitz (1989). She did not find a relationship between song-learning accuracy and language development among these subjects. Finally, Goetze (1985) found that young children sang melodic examples more accurately on the syllable "loo" than with text.

The present study will continue a line of previous investigations into various aspects of song learning and song teaching. An earlier study focused on singing accuracy in a newly-learned song according to teaching method and age or grade level (Mizener, 1998). That study yielded no differences in song-learning accuracy relative to two teaching methods: phrase-by-phrase and immersion. Results did indicate that musical experience, not just age, might be a factor in

singing accuracy and the song-learning process. A study including the variable of musical experience, however, showed only limited relationship between song-learning accuracy and musical experience (Mizener, 2003). The purpose of the present study was to focus on another feature of song teaching and song learning: the use of text or no text (neutral syllables) in teaching a song. The primary research questions were: (a) what are the relationships between song-learning accuracy and two teaching methods, teaching songs with text and teaching songs without text? and (b) what are the relationships between song-learning accuracy and musical experience, including participation in elementary school music classes, participation in music ensembles, and current musical participation? Secondary research questions included: (a) what are the relationships between singing skill and song-learning accuracy in performances of songs learned with and without text? and (b) how do the song-learning accuracy scores of the two songs compare?

Method

Subjects ($N = 81$) comprised music majors and interdisciplinary studies (elementary education) majors in three classes of elementary music methods, two for the interdisciplinary studies majors and one for the music majors. Before learning the new songs, subjects signed informed consent forms and were offered one excused absence or permission to not submit one written assignment during the semester for their participation in the study. In addition, subjects completed questionnaires seeking information about musical background and experience. Subjects responded to items regarding music instruction in elementary school, past participation in musical ensembles, private study in voice or an instrument, and current musical involvement. A preliminary assessment of singing skill was conducted before the subjects sang the new songs.

Two traditional songs were selected for use in the teaching process. They were "Tideo" and "Jubilee" (Hackett, 1998). The two songs were similar in length, meter, range, varieties of intervals, and form. The songs were screened for motives, phrases, or melodic fragments that might have been reminiscent of familiar songs. Texts in the chosen songs were free of archaic or uncommon use of language.

Both songs had a range of an octave, and they were pitched so the range fell between C4 and C5 for female subjects and C3 and C4 for the male subjects, where C4 is middle C. This range is considered suitable for the average untrained adult singer. The songs were six measures in length, and both were in quadruple meter. They both had a four-measure verse-two-measure refrain structure. Their forms were similar, a b a c d c for "Tideo" and a b a c d e for "Jubilee."

Each class learned both songs. In one class, subjects learned "Tideo" with text by a phrase-by-phrase method, and they learned "Jubilee" with a neutral syllable in place of the text by the same phrase-by-phrase method. Subjects in the other class learned "Jubilee" with text and "Tideo" with a neutral syllable also using a phrase-by-phrase method. The subjects customarily learn songs by this phrase-by-phrase method.

The method started with the subjects listening to the song three times with a question or activity for each listening, followed by the subjects echoing each phrase and pairs of phrases, and concluding with the subjects echoing the entire song. The teaching routine controlled for the number of times subjects heard and sang the songs in the learning process. The song-teaching procedures were somewhat different from a typical song teaching approach in that no attempts were made to correct inaccuracies. Corrections and additional repeats would have made the number of hearings and repeats unequal among the classes.

The researcher recorded the subjects individually singing the songs on audiocassette tapes within a week of the day they learned them. Before singing the newly learned songs, subjects sang "Yankee Doodle" as a means of demonstrating pitch-matching skill and overall singing skills. The researcher gave a pitch and tempo cue, singing the first few words of the song and following them with "Ready, sing" in tempo and at the initial pitch of the song. If the singer did not match pitch immediately, the researcher briefly worked with him or her to increase the accuracy of the beginning pitch. After that, no attempts were made to correct the pitch. Subjects had access to a printed copy of the text of the song learned with text.

The tapes were analyzed for the degree of singing skill demonstrated by the subject and for song-learning accuracy. Singing skills of the subjects were assessed according to an eight-point set of criteria, a modified version of the seven-point set used by Mizener (1993) for assessing singing skills of untrained singers:

Singing Skill Scoring Criteria

8 = Begins and ends in same tonality with no loss of tonality within the song and no noticeably inaccurate intervals

7 = Begins and ends in same tonality with no loss of tonality within the song but with some noticeably inaccurate intervals

6 = Ends in tonality different from beginning tonality through a gradual drift in pitch. Some pitches are almost unnoticeably inaccurate

5 = Begins and ends in same tonality but with loss of tonality within the song and some noticeably inaccurate intervals

4 = Ends in tonality different from beginning tonality with some noticeably inaccurate intervals and/or an abrupt shift in tonality within the song

3 = Begins and ends in same tonality but with little pitch variation around the tonal center

2 = Ends in tonality different from beginning tonality or ends in spoken tones, with little pitch variation around the tonal center

1 = Has no clearly established tonal center and most intervals are inaccurate or is chanted in spoken tones

Song-learning accuracy was determined by accuracy in pitch, rhythm, contour, and tonality. The ratings used in this study were adapted from those used in a previous related study (Moore, Brotons, Fyk, and Castillo, 1997). The score for pitch (melodic accuracy) was the percentage of pitches sung correctly. Melodic accuracy was determined by a combination of accurate pitches and intervals performed in the song. If the interval relationships in the singing performance matched those in the song within a semitone, even though they were at a different pitch level from that in the original key of the song, the pitches were considered correct. The researcher used a set of melody bells to identify the pitches sung. For rhythm, a score of one point for each phrase was given if no more than one rhythmic error per phrase occurred. Any single pitch sung with an inaccurate duration was counted as an error. Interval direction but not size determined the contour score. One point for each phrase was given if no more than two intervals were in the wrong direction. The score for tonality was determined by the last pitch of the phrase. One point was given for each phrase in which the last pitch was in the same tonality as the beginning pitch. The categories of rhythm, contour, and tonality could each receive a maximum score of six.

Crosstabulations were used to determine any relationships between variables in the study, including variables involving various aspects of singing skill, song-learning accuracy, presence or absence of text, and variables related to musical background and experience.

Results

Subjects in the present study (N = 81) were divided into two subgroups according to the songs learned with and without text. Thirty-four subjects learned "Tideo" with text and "Jubilee" without; 46 learned "Jubilee" with text and "Tideo" without. In the tests for significant relationships between variables, some comparisons have a total number of subjects less than 81 or less than the totals for subgroups because of missing data. Missing data occurred because a few items on the questionnaires were left blank or because of not recording a song (the subject was out of the room when the song was taught or simply did not remember enough of the song to sing it). There were 12 males (14.81%) and 69 females (85.19%) and of those, 11 (13.58%) were music majors and 70 (86.42%), interdisciplinary studies majors.

In an initial assessment of singing skill, only 3 (3.84%) did not start "Yankee Doodle" on the given pitch. A higher percentage of the subjects did not match pitch at the beginnings of the songs learned for the study. For "Tideo" with text, 3 out of the 33 subjects singing it (9.09%) did not match pitch by the second note, and for "Tideo" without text, 3 out of 46 subjects (6.52%) did not match the given pitch. On "Jubilee," 2 out of 46 subjects (4.34%) singing it with text failed to match pitch, and 4 out of 34 (11.76%) singing "Jubilee" without text did not match pitch. These results are similar to those found in previous studies (Mizener, 2003; Mizener, 1998; Mizener, 1993) investigating singing skill and singing accuracy. In those studies, 90% to 96% of subjects matched pitch. Furthermore, as in the most recent study by Mizener (2003), sometimes subjects sang the first pitch of the song under pitch, but sang the second and subsequent pitches at the given pitch level. The opposite occurred in this study also. Some subjects started the song on the given pitch and then immediately started to sing at a different pitch level thereafter.

Regarding the primary research questions, analysis of the data indicated only one significant relationship between song-learning accuracy and teaching method. The relationship occurred between "Tideo" learned with text and without. Of the subjects learning the song without text, 31 of the 43 (72.09%) sang it with a score of 7 or 8 for singing skill, whereas 21 of the 33 subjects singing it with text (63.63%) sang it with a score of 7 or 8 for singing skill (X^2 (11, N = 33) = 37.92, $p < 0.047$, Cramer's $V = 0.479$). Percentages of singing skill scores in the lower half of the eight-point scale were nearly equal for learning the song with text (18.18%) or without text (18.61%).

There were several additional significant relationships between musical experience items and song-learning accuracy. The musical experience items with significant relationships to singing performance included frequency of current performance, previous performance in a musical ensemble, and experience in music classes in elementary school. As explained previously, performance in the areas of pitches, rhythm, contour, and tonality determined song-learning accuracy, and an eight-point scale involving interval accuracy and overall maintenance of tonality indicated singing skill.

The frequency of current performance was related to several aspects of song-learning and singing skill, and all of those occurred with "Jubilee" taught with text. All 15 of the subjects with scores of seven or eight on the assessment of singing skill for the song play or sing daily (X^2 (11, N = 39) = 42.74, $p < 0.011$, Cramer's $V = 0.523$). These subjects represented 38.46 % of the

total number of subjects singing "Jubilee" with text. Similarly, 80% of the subjects who play or sing daily performed "Jubilee" with text with 90-100% pitch accuracy (X^2 (10, $N = 39$) = 39.79, $p < 0.005$, Cramer's $V = 0.505$). Finally, 100% of the subjects who play or sing daily had scores of five or six on tonality; that is, they maintained tonality on at least five of the six phrases (X^2 (10, $N = 39$) = 43.80, $p < 0.002$, Cramer's $V = 0..530$). It appears that the subjects who took part in music-making daily also were more likely to have higher scores in singing accuracy and song-learning accuracy. These findings are similar to the results in the 2003 study by Mizener in which singing accuracy scores on "Jubilee" were higher among subjects participating in musical activities more frequently.

Two more items had significant relationships to singing skill and song learning. Previous performance in a musical ensemble had a significant relationship to singing "Jubilee" without text (X^2 (6, $N = 31$) = 9.86, $p < 0.043$, Cramer's $V = 0.564$). Of the 31 subjects singing "Jubilee" without text, 13 (41.93%) sang it with singing skill scores of seven or eight. As for relationships to the variable of regular music classes in elementary school, 80.65% of subjects with such experience maintained tonality on at least five of the six phrases (X^2 (7, $N = 40$) = 12.63, $p < 0.027$, Cramer's $V = 0.562$). These results seem to indicate that subjects with previous musical instruction either in general music or in performance groups also have higher scores for singing skill and song-learning accuracy.

As for the secondary research questions, no significant relationships occurred between the two teaching methods for "Jubilee" and singing skill or song-learning accuracy. Similarly, none was found for comparisons of singing skill or song-learning accuracy between the two songs with text or the two songs without text. Although the students commented that learning a melody without text was more difficult than learning one with text, the results indicate no real differences.

Results of this study support those of a previous study in which current participation in musical activities was associated with a higher level of singing skill. They also indicate that public school musical instruction, both in elementary general music and in performing ensembles, is associated with higher levels of singing skill and song-learning accuracy. The importance of singing in the music curriculum and the fact that singing is a widespread means of musical participation indicate that music instruction and music participation should be promoted as ways of improving singing skills. The results of this study also indicate a need for further research into the effectiveness of song instruction and the nature of singing accuracy. Although some subjects commented that songs were easier to learn with words or that one song was more difficult than the other, the data did not support their remarks. Future research might create a different design for studying the performance of songs taught with and without text. It is clear that song teaching and song learning are important topics in music education and deserve further study.

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The Effect of Method Book Content on Adult Instrumental Musicians' Reported Understanding and Enjoyment

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Many writers have noted the challenges associated with choosing a suitable method book for an ensemble instructional setting (Buehlman, 1973; Ely & Stowers, 1995; Gowman, 1977; Heavner, 1994; Kress, 1981; Monty, 1986; Olson, 1982; Pizer, 1971; Rivera-Diaz, 1992; Tatton, 1994; Warrick, 1987a, 1987b, 1988a, 1988b, 1988c, 1989).

Pedagogical articles have provided guidance through method book evaluation sheets (Pizer, 1971) or context-based questions (Buehlman, 1973; Gowman, 1977; Olson, 1982; Tatton, 1994) to help educators choose an appropriate book. Other non-research articles have provided descriptions of method book content to enable educators to compare scope and sequence (Buehlman, 1973; Ely & Stowers, 1995; Warrick, 1987a, 1987b, 1988a, 1988b, 1988c, 1989).

Descriptive research studies have reviewed method book content (Tullberg, 1992), and described directors' use of method books (Heavner, 1994; Monty, 1986/1987). Experimental studies have investigated the effect of method book use on the performance ability of young musicians, and found that performance achievement did not vary with the introduction of different method books (Kress, 1981; Monty, 1986/1987; Rivera-Diaz, 1992/1993).

It is unclear whether the aspects advocated in non-research articles or the results of research studies would be the same if the beginning band members were adult musicians instead of youngsters. In articles specifically addressing adult learners, Klotman (1961) asserted that it may be appropriate to use the same teaching materials for adults as would be used with younger learners, while others have advocated using different materials for older learners (Burley, 1987; Orlofsky & Smith, 1997; Oseng & Burley, 1987; Solbu, 1987). For whatever learning materials that are used, writers on adult learning have stressed the need for materials to be relevant to the adults learners' present needs and congruent with the learners' past experiences (Friedmann, 1992; Myers, 1989). In a music pilot study of adult learners, the issue of material relevance and congruence was highlighted through many of the adult beginning band directors' statements that they commonly chose music because it was familiar to the adult musicians (Rohwer, 2004). While method books are commonly used as the learning material in the beginning instruction of adult ensemble classes (Black, 1999; Rohwer, 2004), Black (1999) warned that a method book should be specifically chosen "that is appropriate for mature adult students" (p. 47).

As adult ensembles are becoming a more common entity in community music education settings, there is a greater need for an in-depth understanding of material appropriateness in relation to adult learning potential. Since method books are often used as the source material for beginning ensemble instruction, there is a need to investigate if adult learners report greater understanding and enjoyment using various lesson book formats. The purpose of the current study was to compare the content of three method books on adult instrumental musicians' self-reported understanding and enjoyment.

Method

The adult instrumental musicians in the study were 24 beginning to intermediate level wind, brass, and percussion members of a Senior Citizen Beginning Band. The 13 men and 11 women in the band played the following instruments: flute (2), clarinet (4), alto sax (5), tenor sax (2), trumpet (6), trombone (1), baritone (1), tuba (1), and bells (2).

The musicians played two method book pages, one introducing the concept of cut-time meter and one introducing the concept of six-eight meter, from one unpublished and two published method books. The musicians had all been playing their instrument in the band for at least one year, and hence, level two method book content was used so as to be appropriate to the musical level of the musicians. The two published method books were chosen based on a past study that cited the Essential Elements 2000 and Standard of Excellence as the two most widely used method books in a study of 35 surveyed adult bands (Rohwer, 2004). The researcher formatted a third method book that used music commonly preferred by mature adults (Broadway songs and standards) to teach each of the two concepts. The songs in the Broadway songs and standards pages were chosen: 1) to highlight the metrical concept, and 2) to approximate a comfortable and realistic range and key center (see Table 1 for a complete list of songs and musical concepts addressed).

Table 1

Method Book Content

Cut-time Meter Page

Essential Elements (Bk 2)	Standard of Excellence (Bk 2)	Adult songs
Rhythm Rap[a]	Cut and Paste[a] (in Bb)	Warm-up[a] (in Bb)
A Cut Above[a] (in Bb)	Oats, Peas, Beans[b] (in Eb)	Give My Regards[e] (in Eb)
Yankee Doodle[b] (in Eb)	The Victors[c] (in Bb)	Swanee[f] (in Eb)
Marianne[b] (in Eb)	Over Easy[d] (in Ab)[1]	I Want a Girl[f] (in Bb)
The Victors[c] (in Bb)	High School Cadets[c] (in Bb)	Hello, My Baby[f] (in Eb)
Essential Creativity[d] (in Bb)		

Six-eight Meter Page

Essential Elements (Bk 2)	Standard of Excellence (Bk 2)	Adult songs
Rhythm Rap[a]	C Major Scale[a] (in C)[1]	Warm-up[a] (in Eb)
Lazy Day[a] (in Eb)	Over the River[b] (in C)	Angel of Music[e] (in Eb)
Row Your Boat[b] (in Bb)	Oodles of Noodles[d] (in C)[2]	K-K-K-Katy[f] (in Bb)
Jolly Good Fellow[b] (in Eb)	Ups and Downs[d] (in Eb)	76 T-bones[e] (in Bb)
Chanson[b] (in Eb)	Specific Instrument[d] (in C)[1]	Look Me Over[e] (in Eb)
Johnny Comes Marching[b] (in Bb)		

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[a] *Warm-up*   *Metrical note: song only in meter other than concept:*
[b] *Folk song*   [1] – *in 4/4*
[c] *March*   [2] – *in 3/4*
[d] *Method book composition*
[e] *Broadway song*
[f] *Standard*

The musicians were given one week to practice the three cut-time sheets. All of the songs were then played in a full band rehearsal. Performance order of the pages was randomly chosen. Evaluation sheets were passed out after each page was played. The same procedural format was followed for six-eight meter, starting one week after the completion of the cut-time evaluation sheets.

Musical understanding and enjoyment were assessed using a 10-item questionnaire. Each musician was asked the same 10 questions for each method book format, for a total of 30 cut-time questions and 30 six-eight questions. Each question was in a Likert format containing five response options that ranged from strongly agree to strongly disagree. Two of the items were

negative items, and hence, were reverse scored. The set of 10 questions rating each method book was summed to get a self-reported attitude score for musical understanding and enjoyment.

Content validity for the 10 items was assessed through a panel of three experts in the field. The experts, who were all conductors of music education ensembles for adults, revised the wording of the questions, but made no content adjustments. Two adult musicians who were not in the main study then checked the clarity of the questions. Because a comparable group of adult musicians at the more beginning level of instruction was not available, internal consistency for the 10 items was checked with a group of 10 middle school students in their second year of playing. The students played the Essential Elements cut-time method book page and answered the 10 questions. The internal consistency (coefficient alpha) reliability estimate from this group was .91.

Data were analyzed descriptively through the use of means and standard deviations. Comparisons were calculated through the use of one repeated-measures ANOVA for the cut-time pages and one repeated-measures ANOVA for the six-eight pages. Effect size and power estimates were calculated to add further clarification to the statistical analyses. Effect size information was based on eta squared (n^2) criteria of .01=small, .06=medium, and .15=large.

Results

Results of the study showed that there was no statistically significant difference in the adult musicians' musical understanding and enjoyment for the three method book formats in either cut-time meter, $F (2, 46) = .58$, $p = .57$, ($n^2 = .02$, power = .14) or six-eight meter, $F (2, 46) = 1.20$, $p = .31$, ($n^2 = .05$, power = .25).

Descriptively speaking, the means for each of the 10 questions on the cut-time method book pages were highly similar, with Essential Elements having slightly higher means for the questions "I enjoyed the songs on this page", "I feel that I learned the concept well", "The songs flowed smoothly from one song to the next" "The songs on this page sounded nice when played by the band", "From this example page, I feel like this would be a great method book", and "I would feel motivated to practice if I used this method book". Standard of Excellence had slightly higher means for "I liked the layout of this page", "I think the songs were good examples to teach the concept" and "The songs were too difficult" (reverse scored). The Broadway songs/standards method page had slightly higher means only for "I feel that the songs were more appropriate for children than they were for adults" (reverse scored).

The means for each of the 10 questions on the six-eight method book pages were also similar, with Essential Elements having slightly higher means for many of the same questions as the cut-time example ("I feel that I learned the concept well", "The songs flowed smoothly from one song to the next" "The songs on this page sounded nice when played by the band", "From this example page, I feel like this would be a great method book", and "I would feel motivated to practice if I used this method book") in addition to the item "I liked the layout of this page". Response means for "I enjoyed the songs on this page", were identical for the Essential Elements and the Broadway/standards pages. Standard of Excellence had slightly higher means only for "The songs were too difficult" (reverse scored). As in the cut-time page, the Broadway songs/standards method page had slightly higher means for "I feel that the songs were more appropriate for children than they were for adults" (reverse scored). Response means for "I think the songs were good examples to teach the concept" were identical for the Standard of Excellence and the Broadway/standards pages.

It should be noted that in all likelihood these slightly higher means for the various method pages are attributable to measurement error and not to any important differences in perception between groups.

Discussion

In conclusion, the current study participants did not differ on their perceived understanding and enjoyment for the three method book formats, (two of the formats being the standard school-age method book and one format containing what might be considered as more "adult" musical styles as the content). Therefore, results of the current study seem to indicate that there may not be a need for publishers to develop a method book specifically intended for adult musicians.

Informal feedback from individual study participants also supported this finding. Due to the fact that the songs on the Broadway/standards page were all "older" tunes, the participants did note the difference between the three formats. At the completion of the study some of the musicians wanted to add their verbal opinion to the questionnaire data. One musician said, "I feel like I can go quicker through a school method book because the songs are easier and I am smarter than youngsters would be". Another musician explained her lower markings on the Broadway/standards page by saying, "While I liked the songs on this page, I don't think it helped me to *learn* cut-time or six-eight time because I was playing by feel instead of really thinking about the rhythm".

The "playing-by-ear" instead of reading and analyzing scenario may be especially true with Broadway/standards songs, since popular music (which the Broadway/standards examples were in many cases) is often transcribed with stylistic rhythmic accuracy, and hence is more complicated for music reading. If watered-down, the tunes lose their authenticity, which can undermine the familiarity and preference usefulness for the adult musicians. This authenticity versus beginning-stage-of-learning dichotomy is a continuing challenge for those working with adult learners.

Another possible explanation for the lack of greater perceived understanding and enjoyment for the Broadway/standards method book pages may be the musicians' desire for greater variety in their method book examples. For the Broadway/standards method book pages, all of the songs were in the same meter and were all common "adult" songs. It is possible that variety of style, tempo, and key, may be just as enjoyable to adult learners as familiarity would be. The variety of keys and songs in method books could be used in adult band settings to reinforce basic concepts in interesting ways. Especially when teaching challenging concepts, directors may wish to consider supplementation of content from multiple method book formats to aid in instructional variety.

Clearly, it is encouraging for instructors of adult ensembles to know that level two method book content and format seem to be useable by adult musicians; the songs and format contained in the level two method examples were generally pleasing to the study's participants. While responses to the statement "I feel that the songs were more appropriate for children than they were for adults" were less favorable to the traditional method book format in both the cut-time and six-eight formats, the other favorable aspects in the published books seemed to lessen the importance of this aspect for the adults.

Further research may still need to address whether level one format and content would produce the overall same results as found in the current study, especially since level one method books commonly contain the songs that are traditionally considered to be childhood songs such as "Twinkle, Twinkle" and "Hot Cross Buns".

Continued investigation is needed into the materials used to most efficiently and effectively instruct adult musicians. While the current study provides an initial look at adult musicians' self-reported understanding and enjoyment, experimental studies utilizing performance measures instead of self-report would be able to provide more stringent conclusions. Studies that investigate content other than method book formats with adult learners would also be beneficial.

Future research in the area of content for adult musicians should also, if at all possible, address sample size issues. While it is sometimes difficult to find large populations for adult education research, the statistical power for the current study would have been inadequate to find important differences if they indeed had existed, in most part due to the small sample used.

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