

Music Specialist Attitudes Toward Music Integration of Core Curriculum Areas

by

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ABSTRACT

This is a study of the attitudes of music specialists toward curriculum integration. Muhammad (2007) stated that the attitudes of teachers could affect the entire school culture. Shriner, Schlee, and Libler (2010) researched how the study of standards and the ability to save time with integration improved the teacher's attitude towards curriculum integration. Bresler (1995) placed curriculum integration into four categories- the subservient approach, co-equal/ cognitive approach, the affective style, and the social integration style. Each of these approaches places different emphasis on how the curriculum integration is completed. How does a music specialists' attitude affect how and if he/she will perform curriculum integration? Colwell and Berke (2004) stated that with training music specialists felt more comfortable with curriculum integration, but they had less intention to insert other subjects into their music curriculum. Jenkins (2012) detailed that with better training, the arts magnet school teachers felt better prepared to integrate other curriculums into the music curriculum lessons over their peers that taught music in regular schools that did not receive the training on curriculum integration. Bush (2007) studied the differences in professional development preferences between the general music specialists, choral teachers, and the band teachers and found that general music specialists were more likely to take a professional development course on curriculum integration than their performance-oriented peers. This study researched if there are differences in the attitudes toward curriculum integration between the general music specialists and the performance specialists of choral and band/orchestra specialists based on the levels of elementary school, middle school/junior high school and high

school. The study was conducted in a school district in Tennessee and through the Tennessee Music Education Association. The current research study did find differences in attitudes curriculum integration based on level taught and subject taught in which a positive attitude towards curriculum integration was seen. Additionally, the training that participants had received before the study was not sufficient to meet their needs to integrate core subjects into the music curriculum.

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GLOSSARY

Affective Style Approach—when the purpose of the integration focuses on controlling the mood of students or creativity with no further learning.

Curriculum Integration -- using multiple subjects to enhance student learning (Kim and Cho, 2015).

Co-equal/ Cognitive Approach—All subjects in the lesson are taught with equal emphasis that focuses on in-depth knowledge and experiences.

Holistic Approaches--addressing the needs of the whole child, including cognitive, physical, moral, affective, and spiritual dimensions (Bresler, 1995, p 31).

Infusion--integrating a particular subject across the curriculum (Bresler, 1995, p 31).

Interdisciplinary--maintaining traditional subject boundaries while aligning content and concepts from one discipline with those of another (Bresler, 1995, p 31).

Metadisciplinary--comparing the practices within a particular discipline (Bresler, 1995, p 31).

Multidisciplinary—looking at a situation as it was portrayed in different disciplines (Bresler, 1995, p 31).

Social Integration Approach—the arts are used for the social aspect performing to showcase the school to the community.

Subservient Approach – Where one subject is placed in a supporting role and not given equal emphasis in the lesson. This approach does not emphasize artistic value in the lesson or material.

Topics-Within-Disciplines--integrating multiple strands of the same discipline within the instructional setting (Bresler, 1995, p 31).

Thematic Approaches--subordinating subject matter to a theme, allowing the boundaries between disciplines to blur (Bresler, 1995, p 31).

Transdisciplinary--examining a concept as it appears in political and in physical discourse (Bresler, 1995, p 31).

CHAPTER 1

INTRODUCTION

In today's world of education, curriculum integration has become an essential component of what teachers use to instruct their program. Many teachers complain there is not enough time to teach each of the required curriculum standards, so they are turning to curriculum integration as a method of maximizing instructional time. Curriculum integration is an older concept that dates to John Dewey and Francis Parker with the first introduction of the concept in the late 1800s and early 1900s (Hinde, 2005). Bruner (1960), cited the integration of technology as a means of furthering student understanding of a subject. Kaufman and Brooks (1996) offered a much clearer definition of curriculum integration as an interdisciplinary approach to solving problems using different subjects and specialists collaborating in their area. Kim and Cho (2015) defined curriculum integration as using multiple subjects to enhance student learning. For the purpose of this study, the researcher will define curriculum integration as the use of multiple subjects to enhance student learning.

Many music specialists feel pressured to integrate other subjects into their lessons. The music specialists must be mindful of how much class time is devoted to curriculum integration. This is because not all music specialists have the same amount of contact time with students. Joint reports by the U.S. Department of Education and the National Center for Education Statistics (2011) indicated that music specialists in the 2009-2010 school year had an average of 22 hours per week with a class load of 25 different classes.

This translates to an average of 52 minutes of instruction per week for each class. This included time spent teaching all the music standards, as well as any other curriculum integration that was incorporated into the music classroom. In 2012, the U.S. Department of Education Report on the Arts, 62% of music teachers integrated other subjects into a music lesson or unit that they taught, 42% of these specialists reported having more than four hours per week of planning or preparation times during the school day.

The integration of core academic subjects such as language arts, math, science, and social studies in the music curriculum is accomplished in many lessons or units. Teachers must always be aware of how much time is used for other subjects in music class. Eisner (2009) stated that what education could learn from the arts is that the different disciplines cannot be separated. Eisner and Powell (2002) further stipulated that the distinction between disciplines goes back to Plato. This is the case of the arts and sciences. Eisner and Powell further note that the sciences have forgotten about the similarities they share with the arts. The authors point to the work of John Dewey and how he would place the arts on a pedestal to reestablish a connection between art and life.

One important concept of curriculum integration is to break the artificial boundaries between subjects and not to marginalize any subject when teaching other subjects within the lesson (Beane, 1997). All subjects have their place in the curriculum, and there are places in which subjects can cross over and deepen the understanding for students.

Bresler addresses why art specialists integrate outside curriculums into their subjects. According to Bresler (1995), it is because they seek to establish a more solid place in the curriculum for the arts. In this situation, the arts specialist collaborates with classroom specialists to strengthen the links between subjects. Additionally, Bresler also makes the point that principals view curriculum integration as a vision where classroom specialists teach the arts within their subjects, thus saving the schools time, money, and other resources. Many teachers were ambivalent towards the area of arts integration because they see it as another mandate that they must perform. Classroom specialists want those students that are less academically motivated or talented in other ways to have a chance to draw upon their talents and strengths that may lie within the arts.

Music Standards with Curriculum Integration

The state of Tennessee has identified nine standards related to music education. Of these, two dealt with the integration of other subjects into the music curriculum. The Tennessee standards are based on the national music standards introduced in 1994. The Tennessee State 5th grade standards focus on the integration of the arts disciplines and academic disciplines. Some examples of the Tennessee General Music Standards (TGMS) include:

8.2.1 Describe the literary characteristics of song lyrics.

8.2.2 Investigate the relationship of music to literature, mathematics, science (e.g., acoustical properties of instrumental music), and/or social studies in teacher-given classroom activities.

8.2.3 Compare music to other selected academic disciplines. (Tennessee, n.d. p. 10).

TGMS 9 focuses on the students being able to understand the relationship of music to history and culture (Tennessee, n.d. p. 10). Some examples of this standard are:

9.1.1 Discuss characteristics of selected cultures within a musical and/or historical context using teacher-given parameters.

9.1.2 Demonstrate an understanding of the music of selected cultures and/or historical periods through performance of music examples (vocal and/or instrumental).

9.1.3 Compare and contrast music examples of selected cultures and historical periods (Tennessee, n.d. p. 10).

According to Parameter 9.1.1, which is a component of the Tennessee State Standards for 5th grade music, integration occurs with teacher-given parameters, thus giving the teacher the ability to choose what is taught in this section of the standards. The other aspects of culture and historical time periods relate to that of the subject social studies. (see Appendix A).

Professional Development

Professional development or in-service is a training program that is required of teachers in every state. According to the Tennessee Department of Education (n.d),

teachers are required to complete five days of in-service or professional development at no less than six hours per day (Tennessee, n.d. in-service). (See Appendix B).

The Tennessee Arts Academy (TAA) is the primary state professional development opportunity offered by the Tennessee Department of Education at Belmont University every summer for a week-long professional development experience. Other professional development opportunities may be provided by school systems for their music teachers. Teachers in each system conduct most of these professional development activities; these opportunities focus on the needs of the music programs. Most professional development activities are not planned to work with an overall blueprint of how the curriculum is taught, scope and sequence. Many professional development opportunities offered are completed by outside professional organizations such the America Orff-Schulwerk Association (AOSA), Tennessee Music Educators Association (TNMEA) and the Organization of American Kodály Educators (OAKE), that specialize in training methods for music specialists. As a rule, these types of professional development opportunities are presented on Saturdays, when many of the music specialists are available to attend.

Music Specialist Attitudes Towards Integration

Music specialists' attitudes toward how their subject is perceived among other subject specialists is of great importance. Munroe (2015) stated she felt like her subject was perceived as less valuable than many other subjects in the school. She based this on the types of requests that were received from other teachers. Many of the teachers would ask her to sing songs such as "Fifty Nifty United States" because they were learning the

states and capitals. Munroe denied these requests, because they were contrary to her standards and/or goals. The author was asked to provide the regular classroom teachers with some classical music to use during seat work in their regular classrooms. This was not considered to be integration because other teachers used the music to control the mood of students in their respective classrooms.

For many music specialists, the perception of music's place among all curricula taught in a school ranking is of the utmost importance. Music specialists wonder if the music curriculum is less valuable. In a 2008 study by Colwell, a professional development opportunity was created to aid in the collaboration between music specialists and other core academic subjects. As part of the study, the music specialists' attitudes toward integration were measured. This was done by comparing a pre-assessment to a post-assessment after the professional development was completed. One attitude that was measured was how comfortable the participant felt about integrating other subjects in their curriculum. The results showed that the participants felt more comfortable with creating curriculum integration. The study also sought to determine if participants planned to integrate other subjects into their subject area, and surprisingly, the intention to integrate decreased.

May and Robinson (2016) concluded that much of the scholarly literature focuses on the training of elementary classroom teachers to integrate the arts, not on the music specialist. While there are studies on curriculum integration, most studies concentrate on the outcome of integration of music with outside sources. For example, a study by Berke and Colwell (2004) noted preservice elementary teachers' attitudes toward integration of

music into their subjects after a series of classes. The study found that these preservice teachers' attitudes towards integrating had improved during the course with a change from using music for its social aspects or as a aid for another subject, to create a better understanding of music as a separate subject with its own curriculum and standards. According to May and Robinson (2016), this is typical of current, available studies about music integration.

Research Problem

The purpose of this study is to investigate music teacher's attitudes about integrating core curriculum subjects into their subject area. The specific research questions for this study are: 1. Is there an effect of grade level (elementary, middle school, or high school) that the music specialists teach on their attitudes towards the teaching of the core curriculum in the music classroom? 2. Is there an effect of a music specialist chosen specialty area (general music, band/orchestra, or choir) on their attitude towards the teaching of core curriculum within their grade level?

Need for Study

This study is necessary to measure the attitudes of music teachers in Tennessee because there have been many changes in curriculum, as well as mandates from various counties and the state department of education. Curriculum standards have been revised in numerous subject areas in recent years. The Common Core State Standards (CCSS) were introduced in 2011 (Read Tennessee, 2016), but were repealed in 2015. As part of this repeal, a new review of standards was initiated in subjects such as English/Language Arts and Math (Bidwell, 2015). Other mandates, such as the new recess requirement,

have affected many schedules in elementary school in Tennessee (Cameron, 2016). This mandate has prompted schools to create two periods of recess during the school day for twenty minutes for grades 2-6, and three 15-minute periods for kindergarten and 1st grade. In order to adhere to this mandate, schools are having to revise their schedules accordingly, which is often problematic. To achieve the goal schools are having to locate the time somewhere in their schedules. Many times, this is accomplished by shortening some class periods. At the researcher's school, it was achieved by shortening all class periods by a few minutes. The purpose of this study is to ascertain the attitude of music specialists regarding curriculum integration in Tennessee.

CHAPTER 2

LITERATURE REVIEW

Teacher Attitudes

A central concept to this study is the attitudes of the teacher. Muhammad (2007) studied the attitudes of teachers and stated that the attitudes of teachers could affect the entire school culture. In his book *Transforming School Culture*, Muhammad describes four types of attitudes that can affect a school's culture. These types of attitude are a believer, tweeners, survivors, and fundamentalist. The believers have an attitude that every student can succeed. The tweeners attitude is about learning about the school and their place within the schools framework. These are generally first year teachers in a school. Muhammad does not imply that the tweeners are always new teachers fresh out of college, in fact, that can also be veteran teachers with many years of experience. The survivor's attitude is about mental stability and emotional stability. This type of teacher wants to survive to the end of the year, or even the end of the day. The fundamentalist teacher, according to Muhammad is a teacher that wants to maintain the status quo. This type of teacher prefers the ways of the school to remain unchanged. Muhammad stated that this type of teacher could cause the most problems for school culture. Muhammad further stated that there are excellent and poor teachers in each of these types of attitudes.

Several researchers have noted that attitudes and teaching practice follow behavior. Pfeffer and Sutton (2000) and DuFour, DuFour, and Eaker (2006) each expressed that the culture of a school and the ability of the school to change is based on the attitudes of the teachers and their behaviors. DuFour et al. discussed the Professional

Learning Communities (PLC) and their ability to aid in student learning success. As part of the PLC process the teachers and the PLC must gain a “we” attitude in which all students are their students, not just the students that the teacher has in their particular classroom.

Shriner, Schlee, and Libler (2010) researched teachers' perceptions, attitudes and beliefs towards curriculum integration in a series of three-day workshops that worked with pre-service and in-service teachers using a pretest and posttest survey to measure the attitudes and beliefs of participants. During the workshop, the focus was on aiding the teachers to cluster the standards using technology, integrating core subjects with other subjects, and to facilitate the participant's ability to do more with each subject in less time. The study resulted in the participants being able to learn about the standards and planning on implementing curriculum integration. The results varied due to the subjects that the teachers planned on integrating into their lessons, with language arts and social studies being the highest. It should also be noted that many stated that they planned on integrating the fine arts. In the open response questions, time was often mentioned regarding saving time in lessons and incorporating more standards in lesson time. Comments were made about gaining more practice and mastery towards both subjects. The final results of this study were that the more familiar the teachers became with the standards the teachers were more likely to integrate other curriculums into their curriculum.

Historical Context of Curriculum Integration

Defining curriculum integration has been problematic since its inception in the Herbartian Society in the late 1890's (Beane, 1997). The Herbartian Society's goal was to decontextualize the subject matter and skills that were used in aiding student learning. As early as 1900, John Dewey argued for the inclusion of social experiences and the child's own experience in life to be used in the curriculum. The following quote describes Dewey's definition of curriculum integration:

All studies grow out of relations in one great common world. When the child lives in varied but concrete and active relationship to this common world, his studies are naturally unified. It will no longer be a problem to correlate studies. The teacher will not have to resort to all sorts of devices to weave a little arithmetic into the history lesson, and the like. Relate the school to life, and all studies are of necessity correlated (Dewey, 1900/1915, p.32)

According to Dewey in the previous quote the subjects are not learned in isolation and that they must be learned where they are naturally unified. Hopkins (1935) stated that the integration should both meet the future needs of the learner and should aid his or her social needs. This idea did not continue in the 1950's, as the use of separate subjects became prominent and pushed the concept of curriculum integration into the background. This was due to the emphasis on science after Sputnik in 1957 and many people felt that American schools needed to focus on science so that the United States could retake the lead in the space race (Beane, 1997). With the weight of the curriculum on science and the separate subjects, curriculum integration largely disappeared until 1987 when Bedekamp stated support for integration for young children according to Beane.

In the 1990's, curriculum integration began to reemerge as a viable concept in education. During this incarnation the definition of curriculum integration was changed. Dewey's definition that included the concept of social integration was removed. At this point, curriculum integration would include a multidisciplinary approach (looking at the topic as it applies to multiple subjects) and the interdisciplinary (problem solving and synthesizing perspectives between disciplines) as part of the definition of curriculum integration (Beane, 1997). These new additions to the definition caused problems to a purist like Beane because they wanted only to focus on Dewey's and other originators concepts. But, is the definition the problem or is it the concept of curriculum integration the problem?

In his seminal work, Hattie (2009), used meta-analysis to score and rank concepts used in education from most effective to least effective. When performing this task, Hattie used the score of $d = 0.40$ as the standard for determining that a concept was to be considered effective and equal to one year's growth gained with regular teaching practices. Hattie ranked 138 different items that could affect student learning. Curriculum integration was ranked at 67th with a score $d = 0.39$. The score placed curriculum integration at the cusp of being considered effective. Hattie based his scores on his readings of meta-analysis based on the subject. One meta-analysis used ranged from 1935 to 1997 (Hurly, 2001). Despite the relevance of the concepts as seen in the previous paragraphs, the definition and methods used in curriculum integration have changed since the earliest studies were completed. Another study used was a 2000 dissertation by Hartzler in which 30 studies were analyzed. In this meta-analysis, the most common areas studied for curriculum integration were reading ($N = 19$), math

($N = 16$), and science ($N = 10$), with other subjects not being tested. Part of the results showed a difference in school level effectiveness of curriculum integration. The elementary schools showed an effect rating of $d = 0.5642$, while the middle schools had an effect size of $d = 0.5670$. The one area that had lower effectiveness with curriculum integration was that of high schools with a score of $d = 0.2680$. Using Hattie's cut score of $d = 0.40$ curriculum integration in both elementary and middle school are shown as a good choice to use curriculum integration in the classroom. Curriculum integration was shown to be less effective in the high school classroom. Additionally, none of the studies used by Hattie (2009) addressed the area of integration of the arts or integration within the arts.

Curriculum Integration Defined

Bresler styles of integration.

In a 1995 study, Bresler expanded on the concept of curriculum integration. She develops four different styles of integration that occur relating to music education: subservient approach, co-equal/ cognitive approach, the affective style, and the social integration style. These four approaches are used in many other studies, related attitudes, and practices pertaining to curriculum integration.

The subservient approach is the most common approach used to integrate music into core academic curriculum (Bresler, 1995). This approach includes activities that are common in core academic subject classrooms such as the singing of the "Fifty Nifty United States," which is used to learn the states in social studies, or "The Planets," used

to learn about the solar system in science. Bresler refers to music as the “spice” (p 33) for other subjects.

The subservient approach does not emphasize artistic value in the lesson or material. Instead, it is meant to accentuate the technical value of the arts, which can include coloring, cutting, and memorizing the lyrics to a song. Bresler further states the primary motive for the subservient concept is to save time. This is accomplished by emphasizing integration and learning about the core academic subjects; equal emphasis is not placed on both subjects. In interviews with teachers, Bresler makes a case for teachers having another possible motive, which is building the student’s self-esteem. The classroom teachers will not have the same knowledge in the arts that a specialist will have on the same subject. Bresler states that the subservient style allows the teacher to have alternate methods of learning and creates additional ways to assess the content without having to rely solely on verbal or written communication.

The second approach discussed by Bresler (1995) is the co-equal or cognitive style. In the co-equal or cognitive style, the arts are taught on an equal status as any other subject. The lessons or projects objectives have the students learning music or art standard, which is accomplished by learning the material from other subjects simultaneously. Bresler’s examples demonstrate that students from a school in Chicago were discussing historical time periods while placing the music and its composers into a historical and social context for that particular time period. Bresler further states that while this type of integration is the one most often heralded in the literature, it is also the most difficult type to put into practice in any classroom.

The third approach Bresler (1995) addresses is the affective style. The affective style has two parts - change of mood and creativity. In the first part, the style is used to control or change the mood of the students. Bresler cites numerous times where music is used in the background to help students remain calm in class, relax, or concentrate on their work. In the next part, Bresler states that teachers use the arts as creative activities to help students realize that each student is unique due to the differences in his or her artwork. Each part is about how the students feel and are controlled through the arts.

The final style is social integration (Bresler, 1995). The social integration style complements the academic curriculum by approaching the arts from a social perspective. This style uses the arts in its most public type - performance. Through performance, the students have the opportunity to showcase their accomplishments to the larger community including PTO performances, holiday programs, and various other programs. While there may be some academic qualities to these events, the overall goal of the events is a social one. These programs are meant to be festive and varied, using as many students as possible in the least rehearsal time and preparation time to achieve its goal. With the goal of the performance being one of public relations of the school with the community at large in order to increase awareness of the school in the public's perception.

These styles have been used in many other studies such as Berke and Colwell (2004) and Colwell (2008) utilized the styles to gauge preservice and in-service teachers' attitudes toward arts integration into the core academic curriculum. Mishook and Korhaber (2006) studied principals' attitudes regarding art integration into core academic curriculum using the four styles of integration to gauge attitudes towards the level of integration at their school. Jenkins (2012) also used Bresler's subservient and co-equal

styles in a study that includes 323 Chicago Public School teachers to compare integration attitude difference between the Fine Arts Magnet Cluster Program (FAMCP) and the non-FAMCP schools. All of these studies have built upon and used Bresler's (1995) work to create a basis for defining attitudes toward curriculum integration in the arts.

Wiggins and Wiggins integrating through conceptual connections.

In a 1997 study, Wiggins and Wiggins contended that for curriculum integration to work successfully, it must break the boundaries between disciplines. The integration's focus must remain on what is similar between the subjects. To accomplish this, the subject matter that is to be integrated must be carefully thought out and planned so that no one subject dominates over another.

Wiggins and Wiggins (1997) propose three key concepts regarding curriculum integration. These are: instructional priorities, curricular appropriateness, and conceptual understandings. Each concept demonstrates why the authors conclude that curriculum integration cannot be successful. In many cases one subject (or all subjects) used miss having any relative meaning due to the curriculum integration. This was expressed through a sample in which the students failed to think like the subject that they were studying. An example of this would be students thinking like scientists instead of simply studying the biography of scientists. Curricular appropriateness of integration should be considered, and caution should be exercised when considering using themes or subjects as part of curricular integration. Material linked by a common theme is superficial because it does not address learning across all subjects that are part of the integration. The final area of concern is on conceptual understandings with teachers having clear

understanding of what is being taught in their subject before attempting any curricular integration. The authors further indicate all curricula that are to be taught must be on equal footing with the music curriculum coming first in the process for the music specialist.

Wiggins interdisciplinary curriculum.

Wiggins (2001) addressed many issues involved in curriculum integration that music specialists must consider. He compares Bresler's (1995) approach of "metadisciplinary (comparing practices within a particular discipline) and transdisciplinary (examining a concept as it appears in political and physical discourse)" was compared to Beane's (1997) view of interdisciplinary instruction about life, and that there should be no disciplinary distinctions (subjects) as an example of this problem (Wiggins, 2001. p. 40). While reviewing these articles, fewer than eight percent were research studies, with most of the studies focusing on technology integration and special education goals.

Wiggins (2001) then shares Bresler's (1995) four styles of integration: subservient (where one subject is dominated over another), co-equal (where both subjects are taught in a mutually beneficial way), effective (where music is used to create a mood), and social integration (used to build school spirit) as a way to show progress towards his own five level system. Wiggins (2001) levels are Level 1-Teaching tool connections, Level 2-Topic connections, Level 3-Thematic or content connections, Level 4-Conceptual connections, and Level 5-Process connections. As the levels increase, so do the depth and integrity of the curriculum integration.

Wiggins' Levels 1, 2, and 3 are similar to Bresler's (1995) subservient approach, in which the curriculum integration occurs at its lowest and superficial levels. Level 1 is one subject providing the catalyst for another subject to aid learning on either one. Level 2 can be described as topic connections, in which two subjects are used to clarify or enrich each other as the purpose of integration using a single topic. Level 3 can be described as thematic or content connections. As part of this level, the teacher creates a theme, such as dinosaurs, to motivate the student, but this has little to do with instruction regarding either subject. Each of these Levels place music in Bresler's (1995) subservient role in which the music learning has little meaning.

Level 4 and Level 5 allow curricular integration using both subjects to preserve their individuality as disciplines while maintaining what makes each discipline unique. This enhances the possibility of integrating other subjects into a music classroom. These types of integration allow the students to gain a much perspective, view this learning in the form of life experiences, and demonstrate how all subjects are interrelated. With Level 4 and 5 integrations, Wiggins can be equated with Bresler's (1995) co-equal style of curriculum integration.

Wiggins (2001), also addressed instructional concerns, with an emphasis on planning for curriculum integration. Three popular core curriculum textbooks were examined through the lenses of his five levels. Music was mentioned briefly in a subservient manner and labeled as an "expressive art" (p. 43), although no justification was provided. It was further noted that the arts were simply used for the entertainment value when they appeared in the books. This mirrors the Level 1 and Bresler's (1995)

social integration style, neither of which focuses on the underlying concept from the integration the necessity of music in this situation. No in-depth use of music is used as an integration example in the books. He further states that administrators view music's goal as improving test scores in spatial reasoning, despite the multiple impacts of music on student learning. Finally, it was emphasized that if the class only consists of performance, minus an understanding of how the music was created, then it would be difficult for the music specialist to earn respect due to an unwillingness to further explore their subject area.

Impact of Attitudes Towards Curriculum Integration

Colwell curriculum integration collaboration.

In a 2008 study, Colwell researched the attitudes of regular classroom teachers and music teachers toward curriculum integration between subjects. Colwell's research study measured the attitudes towards music integration and core subject integration, as well as the perceptions of the teacher regarding the possibility of successfully integrating other subjects into his/her curriculum. The study measured the attitudes of interdisciplinary groups from the same school after the completion of a two-week professional development course on curriculum integration. The focus of the professional development was to allow the teachers to collaborate with each other on the nine music standards. The teachers also studied Bresler's (1995) four styles of integration. The results indicated that everyone attending the intended to better integrate music and the core academic subjects.

After the completion of the classes, Colwell used a survey originally created by Berke and Colwell in 2004 to administer to the participants. The results showed only a slight increase in the confidence of the classroom teachers in their ability to integrate music into their curriculum. Colwell also noted that both the classroom teachers and the music teachers were increasingly comfortable integrating music and the core academic subjects. They indicated that they had less intention of doing so after the course. Colwell attributed this to the teachers believing that the time spent planning these lessons did not fit into the natural cycle of their classrooms.

Zdzinski et al., teacher attitudes toward integration.

Zdzinski, Ogawa, Dell, Yap, Adderley, and Dingle (2007) compared the attitudes and practices of music specialists from America to those of from Japan. The study included over 300 participants, and the sample size was divided evenly between Japanese and American teachers. The authors stated that in Japan most music education is taught by classroom teachers. Each of the 136 American participants were music specialists from the state of South Carolina.

A two-part survey in English that was translated for the Japanese teachers before being administered to survey the same questions. The results indicated that the Japanese teachers and the American teachers had different opinions on curriculum integration. The teachers from the United States demonstrated higher attitude rates towards integration than their counterparts in Japan. For example, math and science with United States teachers had a score of $M = 22.39$ as opposed to Japanese teachers at $M = 13.61$. Integration of the arts with United States' teachers had a score of $M = 13.82$ as opposed

to those from Japan with a score of $M = 8.87$. Among United States' music specialists, the highest rates of integration occurred with the subjects that most closely related to the National Content Standard 8 (Music in Relation to History and Culture) and Standard 9 (Music in Relation to Other Arts, and Disciplines Outside of the Arts), with the Tennessee Standards being the same as the national standards. The areas ranked the highest were those pertaining to culture, with lower integration practices dealing with the subjects of astronomy, dance, art, and story creation.

Teachers from both countries were more likely to integrate reading, language, math, and science into their lessons, with one area of difference in social studies. American teachers tended to integrate social studies more than Japanese teachers. Despite this fact, the levels of attitudes toward integration and the actual integration practices are lower for the Japanese teachers. A study by Veblen and Elliot (2000) stated that countries that have a national curriculum tend to have a lower rate of curriculum integration. Additionally, policy differences between the United States and Japan may play a role in the differences, along with such factors as educational mandates, teacher training practices, and different approaches to integration practices.

The final dissimilarity of integration approaches is attributed to the among the music teachers. In the United States, all of the teachers surveyed were music specialists, while in Japan, only 21.9% of the participants were music specialists. This is due to the differences in the curriculum that is prescribed by the Ministry of Education, Culture, Sports, and Technology (MEXT) in Japan that creates the national curriculum. MEXT does not define integration as the combining or synthesis of subjects in the same manner

as the United States. Zdzinski et al. (2007) conclude that for integration to work in any subject, the integrity of the subject must be maintained and the lesson must help build the knowledge for each subject.

Munroe curriculum integration in the general music classroom.

In an 2015 article on curriculum integration, Munroe provided examples of attitudes relating to curriculum integration. She suggested that many classroom teachers' attitudes toward music was only for the benefit of the classroom teachers. This is due to teachers asking her to sing songs such as "Fifty Nifty United States" because it meets objectives in the regular classroom. Munroe did not teach the song because it did not meet her instructional goals and standards. She believed this minimized the role of music and would not help her meet the desired objectives, as requested by classroom teachers. Teachers also requested that Munroe share classical music during seat time, and Munroe classified this as social integration. According to Bresler, this uses music to control attitudes, instead of learning about music.

The article further relates a variety of methods that a music specialist could utilize in order to integrate music with other subjects, beginning with natural connections, which are defined as a theme relating to two different subjects. This example is similar to Wiggins' (2001) Level 3 integration that is based on themes. The author further expands upon Wiggins' warning at the end of his study by stating that integration must start small with subjects that the music specialist is comfortable with teaching. Once the comfort level starts to increase and the teacher begins to make the connections to other subjects

through study and collaboration, student knowledge of integration will increase as they are taught these connections.

Perceptions and Attitudes on Art Integration

May and Robinson perceptions and attitudes on art integration.

May and Robinson (2016) studied the results of a survey using the Beverly Taylor Sorenson Arts Learning Program (BTSALP), an arts integration initiative in Utah. The BTSALP program is an enterprise in which art specialists work with classroom teachers to develop arts-integrated lessons. The goal of these lessons is to be on a co-equal status, with each subject maintaining its integrity. This objective is similar to the co-equal style of Bresler (1995) and Wiggins' (2001) Level 5 types of curriculum integration. The questions focused on the role and support that the specialist received, best practices and implementation of the arts integration, and training and preparedness of the participants to facilitate and teach in the program.

The report stated that 98% of the arts specialists believe that the BTSALP program had the capacity to support the arts and non-arts subjects through integration. Furthermore, 90% of the music specialists also believed that collaboration was an integral part of this process, with only 40% of the respondents stating that they had enough time to collaborate with other teachers. In the four open response questions, three themes emerged. These themes were limited support from the administration and staff for curriculum integration, a lack of planning time to collaborate with other teachers concerning curriculum integration, and the inability to teach the arts for artistic purposes. A response regarding the integration practices expressed support for curriculum

integration of the arts with benefits ranging from increased self-esteem, better collaboration skills, and a better sense of community in the classroom. The response was:

Students retain the information taught. Students are more motivated to learn. Students are physically, mentally, and emotionally involved. Critical thinking skills are enhanced. Creativity flourishes. Students learn to interact socially. They learn to lead, follow, listen, cooperate, etc. Peer relationships are strengthened. Students make more connections to the world around them. No doubt about it, it works! (May & Robinson, 2016, p 20).

The arts specialists' attitudes toward integration was positive, with the main disadvantages being the lack of support from teachers and administrators and the lack of time to collaborate to create the curriculum integration.

Role of Professional Development in Curriculum Integration

Bush perceptions on professional development.

Bush (2007) studied the preferred methods that music specialists use to obtain professional development and the types of favored professional development. A survey was created to compare the views of music specialists from the specialties of band, choral, general music, and strings regarding professional development. The survey also measured the preferred types of professional development between the various fields.

The survey contained a teacher preferences section that asked teachers to detail locations of their professional development. A list of eight possible areas that the music specialists could receive their professional development from. There were eight possible areas in which teachers could receive professional development – discussions with fellow music teachers, discussions with non-music educators, district-sponsored professional

development, internet resources, national in-service conferences, professional journals, state music educators in-service conference, and summer or weekend workshops. All music specialists listed discussion with fellow music teachers as their top choice for professional development with overall ranks and scores being that discussions with fellow music teachers ($M = 4.76$). Workshops and conferences that were sponsored by music organizations were second and third in the survey results, respectively, followed by professional journals and internet sources. Survey results indicated that the least preferred methods of professional development were discussions with non-music teachers ($M = 3.70$) and district-sponsored workshops ($M = 3.49$).

Variations were noted among the specialties about the order of the types of preferred professional development. Differences among the groups are apparent with general music specialists ranking the state conference at 6th, as opposed to the band and string specialists ranking it 2nd. The choral specialists ranked the state music conference at 3rd, because there are more professional development opportunities available for general music specialists. Rankings varied for each category of professional development sources, with the exception of discussion with fellow teachers, which ranked 1st. Specialist chose the area they perceived as fitting their subjects needs the best. (See Appendix C).

Music specialists were also surveyed the about the types of professional developments that they would like to attend. The author of the survey produced 15 professional development subjects, including classroom management, English as a second language, curriculum designed on state music standards, cross curricular integration, and techniques in teaching music. No consensus was reached regarding

ranking of the specialty areas. Technology was ranked between the 2nd and 3rd choice among all groups. The performing groups of band, strings, and choral indicated a professional development activity on reading new music was their top preference, but general music teachers ranked this activity 8th. This variance in ranking is attributed to the different needs of the general music specialist as opposed to the areas of music that emphasize performance. There was a significant difference in preference between the general music specialists and the educators who focus on performing on topics such as recruiting, cross-curricular subject integration, and student assessment. This can be attributed to the differing needs between the performing groups of band, strings, and choral as opposed to the needs of general music specialists.

Jenkins defining curriculum integration, attitudes, and professional development.

As part of a 2012 study of attitudes and practices using curriculum integration, Jenkins surveyed music teachers in both arts magnet schools and regular schools (non-magnet) in the Chicago Public Schools system to rate curriculum integration practices on a scale of one (disagree) to four (agree). The surveys curriculum definition section examples that fell into two of Bresler's (1997) categories of subservient and co-equal that was based on the literature. The goal of this section was to determine if there was a difference between the regular music teachers and the music teachers in arts magnet schools regarding to perceived definition curriculum integration. The questions in the categories would use Bresler's subservient role for music and co-equal status in the examples to survey the music specialists perception of curriculum integration. There were no statistically significant answers for most questions (above $d = 40$). Two

questions did prove to be statistically significant. One question used the example of singing and playing instruments on a song in order to memorize the order of the planets in the solar system. For this question, there was a difference between the magnet teachers and regular teachers of $d = 0.49$.

The survey also included a section on the attitudes of music teachers toward interdisciplinary teaching between the magnet school music specialists and regular school music specialists. This section of the survey contained four questions about the music teachers' attitude towards interdisciplinary teaching. One of these questions asked how the teachers felt about the students experiencing an interdisciplinary arts curriculum. On a four-point rating scale, both groups of teachers believed it was important for the students to experience this interdisciplinary curriculum. The magnet school teachers rated it at $M = 3.96$ and the regular school teachers rated it at $M = 3.79$. Another question was devoted to the amount of time being equal to each subject during the lesson. Jenkins reported that all groups somewhat agreed with the statement or better on the rating scale, with magnet school teachers rating it at $M = 3.59$ and the regular school teachers rating it at $M = 3.00$.

Music teachers were also asked about professional development opportunities as it relates to the area of curriculum integration. The research questions on professional development indicated the greatest differences between the two groups that were surveyed. This is due to the magnet teachers receiving more in-depth training than the regular school music teachers.

The teachers were asked if they felt they had appropriate training related to interdisciplinary studies. Results showed that magnet teachers had a higher level of training ($M = 3.14$ with a $SD = 0.932$) than the regular school teachers ($M = 2.67$ with a $SD = 1.088$).

Additionally, the participants were asked if they had any professional development related to interdisciplinary music teaching. The magnet teachers had a score of $M = 3.54$ with an $SD = 0.744$ and the regular school teachers had a score of $M = 2.08$ with an $SD = 1.121$. These scores indicate that the magnet school teachers had a higher rate of professional development with less variation in score than their counterparts in regular schools.

The teachers were also questioned about their satisfaction with the information that they received during the professional development as it related to the interdisciplinary studies. Responses indicated higher scores, and both groups of teachers were satisfied with the information received. Magnet teachers scored $M = 3.52$ with a SD of 0.58, while regular teachers scored $M = 2.58$ with a SD of 1.174. This indicated a higher degree of satisfaction among regular teachers than on previous questions. The standard deviation score among regular school music teachers doubled the score of the magnet teachers.

Summary of Literature Review

Attitudes can affect the entire school culture according Muhammad (2007). While Pfeffer and Sutton (2007) stated that attitudes followed behaviors of the teachers in the classroom. DuFour et al. stated that the teachers must have a “we” and that all

students are their students and not just ones in their classroom. For the PLC process to be effective the teachers must want to work together improve student learning.

Shriner et al. (2010) researched how the study of standards and the ability to save time with integration improved the teachers attitude towards curriculum integration. The teachers attitude was improved through the facilitation of learning about the standards and how best save time and incorporate the standards form different subjects into their curriculum to improve student learn and mastery of multiple subjects. Shriner et al. also detailed that the different core subjects and arts subjects had different degrees that the teachers were willing to incorporate into their subjects.

Defining curriculum integration is has been a problem since its inception by the Herbartian Society, and Dewey's insistence on the inclusion of social and life experiences must be used for part of the definition (Beane, 1997). The definition has been further changed since its resurgence in the late 1980's that included multidisciplinary and interdisciplinary approaches to teaching. Jenkin's (2012) survey of music teachers from magnet schools and non-magnet schools sought to establish each participant's perception of curriculum integration. These definitions are based on the work of Bresler (1997).

Bresler (1997) placed arts integration into four categories that ranged from subservient style (where the arts are in a lesser role than other subjects) to a co-equal (where multiple subjects are taught together and have equal emphasis placed on them) as a way to classify the level of integration that occurs in a music lesson. Bresler's work is used as the basis of Wiggins and Wiggins (1997) and Wiggins (2001) to create a five-level classification system similar to Bresler's (1997). Bresler's study became the

standard for use to measure the depth of curricular integration such as Jenkins (2012) did by having teachers define integration practices while using examples placed into Bresler's categories.

Attitudes toward curriculum integration can vary depending on factors such as training and time. Colwell (2008) surveyed a group of teachers from various schools after they participated in a two-week professional development on curriculum integration. After this training, the teachers stated they felt better about being able to integrate other subjects into their curriculum, additionally, they also had doubts if they would use integration in their lessons. Zdzinski et al. (2007) studied the difference between American and Japanese music teachers to determine if there was a difference in the attitudes towards curriculum integration. This study demonstrated that American music teachers were music specialists and Japanese teachers were classroom teachers who were required to teach music. Additionally, lessons were created differently using different standards between the two countries. Munroe (2015) did not favor curriculum integration because music was often being used to control the emotions and behaviors of students, but did state music integration was effective if natural connections occurred. May and Robinson (2016) stated that 98% of the art specialists at the BTSLAP program could support learning through curriculum integration. Additionally, 90% of the teachers also believed that this was best accomplished through collaboration, but they did not have enough time to collaborate with other teachers. Jenkins (2012) presented the idea that the magnet school teachers had a better attitude towards curriculum integration, perhaps due to the better training the magnet teachers received.

Jenkins (2012) and Bush (2007) referred to professional development in curriculum integration in their surveys. Jenkins (2012) stated that the magnet school music specialists believed they had better training in curriculum integration. Research data confirmed this belief. Bush (2007) noted the differences in the favored types of professional development activities among different types of music specialists. Band/orchestra and choir specialists and performance groups from secondary schools favored professional development that related to reading music for their performance groups. Conversely, general music specialists and elementary-level teachers favored cross-curricular subject integration.

Purpose of the Study

The purpose of this study is to investigate music teachers' attitudes about integrating core curriculum subjects into their subject area. The specific research questions for this study are: 1. Is there an effect of grade level (elementary, middle school, or high school) that the music specialists teach on their attitudes toward the teaching of the core curriculum in the music classroom? 2. Is there an effect of a music specialist chosen specialty area (general music, band/orchestra, or choir) on their attitude toward the teaching of core curriculum within their grade level.

CHAPTER 3

METHODS

Participants

This study was conducted using a purposeful convenience sample completed in a Tennessee school district and among the Tennessee Music Educators Association's (TNMEA) membership. The first population sample was from a school district in Tennessee school district with approximately 44,000 students enrolled with approximately 3,000 teachers in the school district (Tennessee, 2018). Of these teachers, 89 were music specialists teaching at the following three levels – elementary school, middle school/junior high, and high school, in the various specialty areas of general music, choir, and band/orchestra (L. Halford, personal communication March 1, 2018). The second population sample was from TNMEA, a professional music association that is Tennessee's representative body for the National Association for Music Education (NAfME). TNMEA represents elementary, middle school, and high school music specialists from Tennessee and represents the interests of music educators of all types. TNMEA had 1,302 members during the 2017-2018 school year, but records from the organization did not indicate if the members were teaching elementary, middle school, or high school nor, did the organization document specific areas of teaching general music, choir, or band/orchestra (R. Meers, personal communication, February 2, 2017).

The research district is comprised of music specialists in all three levels of education and each of the specialty areas. There are 30 music specialists in elementary schools, 28 in middle/junior high schools, and 31 in high schools. Within the school district, there are 30 general music specialists, 20 choral specialists, and 38 band/orchestra teachers that may also teach in other music specialty areas, with one choral specialist performing, conducting, or teaching both general music and choral music (L. Halford, personal communication March 1, 2018).

Participant population could not be controlled due to the requirements set forth by TNMEA that no identifiable information could be collected from the participants, such as their names or schools of employment; thus making this an independent variable. It is also important to note that TNEMA does not currently collect demographic data. According to NAFME (2017), 35.5% of the population were general music specialists, 24.8% were band/orchestra specialists, 25.5% were choral specialists, with 14.2% specializing in other areas of music, including teacher training, jazz, and research.

Setting: State of Tennessee Music Specialists

Kindergarten through 12th grade music specialists in Tennessee public schools are bound by the state music education standards, but the quality of instruction and the amount of instructional time varies across the state in the various schools and districts, per each administration. There is also a difference in the grade levels; with some teaching in multiple grade levels, using multiple areas of specialization, and teaching multiple subjects. In Tennessee, schools are divided into three levels: elementary schools, middle school/junior high, and high schools. Each of these levels can have

music specialists as staff members. Music specialists can have further specialty areas within the field of music, such as general music, choral music, and band/orchestra. The general music specialist teaches the basic concepts of music with some performances of student groups, whereas the band/orchestra and choir specialists tend to focus more on performances of their students. Due to these differences, one focus of this study was to ascertain if there was a difference in the attitudes toward curriculum integration between the varying types of music specialists.

Procedures

This research study was a mixed-methods study that used a survey with a four-point Likert Scale, along with two open-ended qualitative questions. For the quantitative portion of the study, a cross-sectional survey was employed; all participants were music specialists that may have taught different grade levels and/or different specialty areas. The purpose of the cross-sectional survey was to measure the characteristics and differences between several different populations at one time to create a census (Mertler, 2016). The qualitative portion was a grounded theory set of questions that asked the participants their attitudes toward curriculum integrations.

The survey consisted of 35 multiple choice questions and two open response questions (see Appendix D). This study was a web-based survey where the participants were asked, if willing, to participate by clicking on the hyperlink that was provided. The link allowed participant access to the web page containing the survey, which also informed participants that participation was strictly voluntary. An introductory page informed the potential participants about the research study and their rights as

participants. An additional link was provided to each participant that, when clicked, granted participant consent. Participants were subsequently reminded on the consent screen of their rights prior to submitting survey answers. Participation was voluntary. Those who did not wish to participate were advised to ignore the email. Responses were recorded electronically, and no identifiable information was collected.

IRB approval was granted, and TNMEA provided final consent prior to the survey being sent to potential participants. Once the link was sent via email and posted on the TNMEA Facebook page, the survey took approximately 10 minutes to complete and remained open for 30 days to allow the membership ample time to respond.

Instrumentation

Survey questions in this study were based on the research that Jenkins's (2012) performed with elementary music specialists in the Chicago Public School System. Jenkins's version of the survey was primarily based on the dissertation of Lee-Holmes (2008), with additional review of (Berke & Colwell, 2004; Byo, 1999; Colwell, 2008; Cutietta & Thompson, 2000; Dawson, 2007; Oreck, 2004; Zdzinski et al., 2007, (Jenkins, 2012, p. 91). This researcher modified the questions originally developed by Jenkins (2012) to make the more applicable to a wider audience of music specialists instead of elementary specialists only. Although questions were modified slightly, there were no thematic changes. After the questions had been modified, the survey was then sent to a small group of music specialists from all levels of music to verify understanding. Upon return of the preliminary survey, an additional modification was completed by changing the term "interdisciplinary" to "curriculum integration." This was done because

“curriculum integration” is the more commonly accepted term of music specialists in Tennessee. Finally, some sections of the original survey were removed because they were not pertinent to this research study.

The survey was divided into four sections: defining curriculum integration, attitudes toward curriculum integration, questions on professional development, and two open response questions, as well as a demographic information section. A Four-Point Likert Scale, measuring from strongly agree, somewhat agree, somewhat disagree, and strongly disagree, was utilized in each of the first three sections. The fourth section included two open-ended questions on how the participant felt about curriculum integration. It was necessary to ascertain participants’ definitions of curriculum integration. Examples were provided based on definitions of subservient integration and co-equal integration (Bresler, 1997). The defining curriculum integration section contained nine questions in it. Questions regarding attitudes toward curriculum integration asked the participants to rate their practices and comfort levels with curriculum integration. The attitudes toward curriculum integration section was comprised of 10 questions. Questions in the professional development section pertained to professional development regarding curriculum integration, professional development opportunities, collaboration with other teachers, planning time, and administrative support that could be devoted to curriculum integration. This section was comprised of eight questions. In the final section, two open response questions prompted participants to detail why they did/did not integrate core curriculum into the music curriculum at their present school. A demographic section contained seven questions, which detailed

participants' teaching level, music specialty area(s) taught, gender, teaching experience, and ethnic populations of students.

Data Analysis

Once the survey was closed, the data was imported to the Statistical Package for Social Sciences (SPSS, v. 25) program. The quantitative analysis occurred in the following order - full group descriptives and statistics, then sub-group comparisons with descriptives and statistics. The full group and sub group comparisons were then followed by the correlation coefficient. Finally, a regression was completed on all data. The system data were completed first, followed by the TNMEA's data. Both data sets were completed using the same methods. The qualitative section was based on grounded theory and was first coded to identify emergent themes and concepts. Upon completion of coding, a data analysis was completed.

Descriptive Data

Population analysis occurred prior to the designation of the sub-groups. Subsequently, participants were divided according to their teaching for further analysis. Other subgroups, such as area specialties, years of teaching experience, and ethnicity, were created to develop additional sections for analysis. Multiple tests of one-way ANOVA, two-way ANOVA, Multiple Regression and the Pearson Moment-Time Correlation Coefficient were used for the analysis. Subsequently, participants were divided according to their teaching levels for further analysis. Survey descriptives were completed in the demographic section to thoroughly detail the population sample size used in this study.

The descriptives included the mean and range for the overall population. Mean and range of the elementary school, middle school, and high school populations were detailed, and were the mean and range of the specialty areas of general music, band/orchestra, and choir. These breakdowns of subgroups allowed the researcher to ascertain if any discrepancies in the survey population existed. The demographic breakdown of subgroups can be compared to the national demographic data provided by NAfME to assess population balance. A descriptive example of a demographic survey can be found in Appendix E.

Attitudes Section of the Survey

Once the demographics were thoroughly analyzed, data from the attitudes section of the survey were noted. First, the mean and mode for the entire population was completed for all the questions in this section based on how the participants rated each question on the Four-Point Likert Scale. Upon completion of the full group analysis, the three levels of population (elementary, middle, high) and the music specialty areas of general music, band/orchestra, and choir were separated, and a survey descriptive was designated for each question. A mean score was calculated for each of these two subgroups. For each question, the ordinal data was created with the rankings of elementary school, middle school, and high school. Subsequently, the rankings of the specialty areas of general music, band/orchestra, and choir were noted. The responses were noted if there were any differences in the attitudes of survey participants, depending on the areas of specialty.

Additionally, a one-way ANOVA was completed to observe any differences in the sub-groups. Statistical significance was based on the difference in the answers with a $p \leq .01$. A one-way ANOVA was completed using the sub-groups specialty areas sub-groups based on the following subjects: general music, choir, and band/orchestra. Upon completion of the analysis, a two-way ANOVA was conducted to compare any differences between the school levels taught and specialty areas. The statistical significance for this two-way ANOVA was based on the difference in the answers with a $p \leq .01$.

Using the outputs from the one-way ANOVA and the two-way ANOVA, each question was analyzed for differences for each group in both the full group and subgroups based on demographics. If differences were found, then a further analysis was conducted by an examination of each question and the answer distribution for a particular subcategory or category based on mean scores. A Pearson Moment-Time Correlation Coefficient was created to examine differences in the answers between each major category of the survey to determine if there were any differences in the overall population or subpopulations by level, specialty area, and gender. After the completion of the Pearson Moment-Time Correlation Coefficient, a liner regression was conducted on any questions that showed significance in the section focusing on defining attitudes. The purpose of the linear regression was to display the direction of the attitudes the teachers' attitudes, and whether these attitudes positively or negatively related to the question being subservient or co-equal in nature. Subsequently, a two-way ANOVA was completed to determine if there were any relationships among the multiple subgroups,

specifically levels and subjects taught. Further analysis was conducted and addressed the differences in attitudes among grade levels and subjects taught in combination. Using the same process of a Pearson Moment-Time Correlation Coefficient, a linear regression was performed on any grouping that displayed significance.

Curriculum Integration Section of the Survey

Curriculum integration was analyzed via completion of the mean and mode for the entire survey population based on answers submitted on the Four-Point Likert Scale. Upon completion of the full group analysis, the three levels taught and the music specialty areas taught were separated, and survey descriptive indicators were assigned to each question. A mean score was calculated for each of these two sub-groups based on demographics. For each question, the ordinal data with the rankings of both sub-groups based on level taught and subject taught indicated, if there were any differences in the attitudes of the different specialties in music at the elementary, middle school, and high school levels.

Once the sub-groups of elementary school, middle school, and high school were separated, a one-way ANOVA was completed to determine if there were any differences in the three groups. Statistical significance was based on the differences in the answers with a $p \leq .01$. An additional one-way ANOVA was completed using the sub-groups of specialty area of music taught (general music, choir, band/orchestra). Upon completion of the one-way ANOVA analysis, a two-way ANOVA was completed to compare any differences between the school level taught and the specialty area of music that was taught. The statistical significance was based on the difference in the answers with a

$p \leq .01$.

Using the outputs from both the one-way ANOVA and the two-way ANOVA, each question was analyzed for differences for each group in the three subcategories based on the level taught and the subjects taught. If disparities were found, then a further analysis was conducted by scrutinizing each question and the answer distribution for a subcategory or category. A Pearson Moment-Time Correlation Coefficient was created to examine differences in the answers between each major category of the survey to ascertain if there were any differences in the overall population or subpopulations by level, specialty area, and gender. After the completion of the Pearson Moment-Time Correlation Coefficient, a liner regression was conducted on any questions in the curriculum integration section with significance. The purpose of the linear regression was to display the direction teachers' attitudes and whether these attitudes positively or negatively correlated with survey questions.

Professional Development Section of the Survey

Professional development was analyzed via completion of the mean and mode of the entire survey population based on answers submitted on the Four-Point Likert scale. Upon completion of the full group analysis, the three levels taught and the music specialty areas taught were separated, and survey descriptors were assigned for each of the professional development questions. A mean score was calculated for each of the three levels. For each question, the ordinal data with the rankings of both sub-groups were created displaying any differences in the attitudes of teachers with different specialty areas in music at the three levels of school.

Once the sub-groups of elementary school, middle school, and high school were separated, a one-way ANOVA was utilized to identify any differences of the groups. Statistical significance was based on the difference in the answers with a $p \leq .01$. An additional one-way ANOVA was completed using specialty area sub-groups (general music, choir, band/orchestra). After the completion of the all the one-way analysis for this section of the survey, a two-way ANOVA was conducted to compare any differences between the three levels of school that were taught (elementary, middle, high) and the specialty areas of music that were taught (general music, choir, band/orchestra). The two-way ANOVA was necessary due to the multiple specialty areas of music that were taught in all levels of elementary school, middle, and high school. The statistical significance was based on the difference of the answers with a $p \leq .01$.

Using the outputs from both the one-way ANOVA and a two-way ANOVA, each question in the professional development section was analyzed for differences for each group in the subcategories and the four main categories. If significance was indicated, a further analysis was conducted by an examination of each question and the answer distribution for a subcategory or category. A Pearson Product-Moment Correlation coefficient was completed to examine differences in the answers between the questions to ascertain if there were any differences in the overall population or subpopulations by level, specialty area, or any of the other demographic areas. The variance of this relationship was collected to clarify the amount of the correlation that could be explained by this occurrence. The purpose of the Pearson Moment-Time Correlation was to examine any differences and the degree to which the variables were related to each other. This data was collected to better answer both the research questions. Following the

correlation, a simple linear regression was completed. The purpose of the regression was to explain either positive or negative attitude scores from the professional development section.

Table 1

Number of Questions for Each Category Example

Question Number	Survey Category	Possible Questions
	Defining:	9
2.2, 2.3, 2.6, 2.8	Subservient	5
2.4, 2.5, 2.7, 2.9, 2.10	Co-equal	4
	Attitude	11
3.2, 3.5 – 3.10	Positive Perspective	7
3.3, 3.4	Ability	2
3.11, 3.12	Negative Perspective	2
	Professional Development	7
4.2 – 4.9	Workshops/Training	7

Comparing Sections of the Survey

Using the Pearson Product-Moment Correlation Coefficient that was created during the previous sections of defining attitudes, curriculum integration section, and

professional development sections were used to examine differences in the answers between the various categories to examine if there were any dissimilarities in the overall population or subpopulations by level taught, specialty area taught, gender, years of experience, degree earned, or school demographic data. The Pearson Product-Moment Correlation was utilized to scrutinize any differences and the degree to which the differences were related to each other. After the strengths of these correlations were established and rated, based on Salkind (2017), for each three sections of the survey, then a simple linear regression was computed using the professional development section scores as the independent variable to predict if there was any effect on the participants' attitudes regarding curriculum integration. A regression line chart was then created to display the distribution of the predictions and the prediction's error in prediction points in relation to the regression line.

Conclusion of Quantitative Data Analysis

Descriptive statistics were used to describe the entire population prior to the creation of any subgroups. Once the descriptive indicators had been created for the population and subpopulations, a thorough understanding of the population basis for the research project was determined. After the population was understood, a one-way ANOVA and a two-way ANOVA were completed on each question and category to determine if there were any differences among the population subsets to answer each of the research questions. These tests were conducted because all questions were used when answering both research questions. The research population was examined to determine the strength of the correlation among various sections of the survey. Finally, the

prediction changes in the attitudes of the participants was analyzed using a regression equation to determine any future effects upon the participants' attitudes, both in the overall population and any given subpopulation.

Table 2

Research Question Flow Chart for Quantitative Portion of Study

Research Question	Data	Analysis
1. Is there an effect of grade level (elementary, middle school, or high school) that the music specialists teach on their attitudes toward the teaching of the core curriculum in the music classroom?	Questions 2.2 - 4.9 of the survey. With question 29 creating the groupings for analysis.	One-way ANOVA Two-way ANOVA Correlation Coefficient Regression Model
2. Is there an effect of a music specialist chosen specialty area (general music, band/orchestra, or choir) on their attitude toward the teaching of core curriculum within their grade level?	Questions 2.2 - 4.9 of the survey. With question 29 creating the groupings for analysis.	One-way ANOVA Two-way ANOVA Correlation Coefficient Regression Model

Qualitative Analysis of Survey

The final two questions of the survey were open-ended questions that prompted participants to detail why they integrate or do not integrate core curriculum in the music

classroom. This information was imported into ATLAS: ti version 8, a Computer Assisted Qualitative Data Analysis Program (CAQDAS). The use of the ATLAS: ti program allowed the researcher to search and compare the qualitative data with the quantitative data by coding of the demographics section of all data. A grounded theory approach was used to analyze the qualitative data. The first and second coding cycles was given a brief overview, and a more comprehensive section followed the overview on each of the cycles.

Three methods were used during the first cycle of coding: structural, attribute, and in vivo. Structural coding, or utilitarian coding, uses the codes-based function of the data being coded. In this case, the function was for demographic information to be easily accessible due to its uses in mixed method studies (Saldaña, 2016). The first-cycle coding also included attribute coding to identify the types of activities or behaviors in the data set. In this data set, attribute coding was used to identify and classify areas such as positive and negative attitudes. The final form of coding was in vivo coding method in which some the participants' statements were used as the code for the process.

In completing the first cycle coding, codes were placed into categories to begin the process of creating themes and theory. During this stage of the process, codes were combined into initial categories. This process was achieved by viewing the qualitative data from many different viewpoints.

The second cycle coding was completed by using pattern coding and theoretical coding. According to Saldaña (2016), pattern coding is used in second cycle coding to help condense the number of codes into categories and themes. Theoretical coding was

used in the second cycle coding methods to bring together various codes into a broader framework that allowed the development of themes and the formation of a theory. Both systems of coding prompted the development of the theory for the qualitative portion of the research study.

Coding Process

In the first cycle of coding, a structural coding method was used to code all items according to the participant's demographic data. The data were then coded in categories related to what the participants taught, such as GENERAL MUSIC, CHORAL, and BAND/ORCHESTRA, and their level(s) they taught, such as ELEMENTARY, MIDDLE/JUNIOR HIGH SCHOOL, and HIGH SCHOOL. After completion of the data, a demographic theme was completed, as shown in Table 3.

Table 3

DEMOGRAPHIC Theme

Code	Category	Theme
0-5 years	Participant Demographic Information	Demographics
6-10 years		
11-15 years		
16-20 years		
21-25 years		
26-30 years		
30 Years or More		
Bachelor's Degree		
Doctoral Degree		
Master’s Degree		
Female		
Male		
Q6.9 African American		
Q6.9 Hispanic		
Q6.9 Other		
Q6.9 White/Caucasian		
Band/Orchestra	Participant Demographic / School Information	
Choir		
General Music		
Other Music Subject Taught		
Elementary		
High School		
Middle School/ Junior High, High School		
Q6.4 African American	School Population Information	
Q6.4 Hispanic		
Q6.4 White/Caucasian		

Survey participants could select from two survey questions. The first question asked the participants to explain their reasoning for including curriculum integration in their classroom. The second question asked the participants to explain their reasoning for

not integrating in the music classroom. Participants were asked to choose one of the two questions in the open answer section of the survey. The first question indicated a positive viewpoint regarding curriculum integration and the second question indicated a negative viewpoint regarding curriculum integration. Initially, the researcher planned to track the number of responses for each viewpoint using the question number. When coding began, many participants responded with both the positive and/or negative viewpoint in the first answer box and omitted the second box altogether. To compensate for this issue, the first two codes were created using attribute coding. The initial two codes created were: POSTIVE CURRICULUM ATTITUDE and NEGATIVE CURRICULUM ATTITUDE. An example of the POSTIVE CURRICULUM ATTITUDE was, “I believe it is extremely important to integrate core subjects in my music teaching.” An example of NEGATIVE CURRICULUM ATTITUDE was, “I feel that music should be learned for its own sake.” Each of these quotes were examples of the extremes of music specialists’ attitudes regarding curriculum integration.

Numerous participants detailed the source of their attitudes regarding curriculum integration. These sources were detailed in the following codes: REASON FOR POSITIVE ATTITUDE and REASON FOR NEGATIVE ATTITUDE. An example of the positive attitude was, “They also tend to retain the material better when they understand the connections.” An example of the negative attitude was, “I wouldn't get any rehearsing done if I were trying to force a connection between a core subject and the piece of music the students are learning.”

Some attitudes were neither positive nor negative, and some participants expressed both attitudes, therefore creating a third code labeled NEUTRAL OPINION FOR CURRICULUM INTEGRATION. An example of this code was:

Music, or any fine art subject, is already integrated enough without having to even try. Some things just happen naturally if you are doing things the right way. I want my main focus to be on teaching music literacy and giving the students as many opportunities to perform which tends to be the biggest reason why I don't do too many integrated lessons

In vivo coding occurred simultaneously with attribute coding. Many of the in vivo codes would eventually be added to other codes, such as POSITIVE CURRICULUM ATTITUDE and NEGATIVE CURRICULUM ATTITUDE. Many of the in vivo codes were chosen because of the clarity of the statement. One example of an in vivo code was, "Additionally; music gains a 'validity' or importance that may otherwise go missing." This code prompted the creation of a fourth category of codes: MUSIC'S STANDING WITH OTHER SUBJECTS. Many of participant statements were categorized under the MUSIC'S STANDING WITH OTHER SUBJECTS, but the validity quote and "Integration also helps ensure music's place in the school curriculum" quotes stood on their own as additional codes.

Professional development or training of teachers for curriculum integration was categorized. This area coincides with the third section of the survey that asks about professional development. The primary code in this category was PROFESSIONAL

DEVELOPMENT/TRAINING. An example of this code was “I also have received little training incorporating curricular subjects into my music teaching.”

All codes indicated a theme of TEACHERS ATTITUDES TOWARD CURRICULUM INTEGRATION AND REASONS as shown in Table 4.

Table 4

TEACHERS ATTITUDES TOWARDS CURRICULUM INTEGRATION AND REASONS Theme.

Integration also helps ensure music's place in the school curriculum.	Music's Standing with Other Subjects	Teachers Attitudes Towards Curriculum Integration and Reasons
Music's Standing with Other Subjects		
Additionally, music gains a "validity" or importance that may otherwise go missing.		
Forced Integration	Negative Integration Attitude	
I feel that we should teach music for music's sake		
Attitude Toward Outside Teaching Subject		
Negative Integration Attitude		
Reason for Negative Attitude		
Reason For Not Integrating in Music		
Reasons for Not Doing Curriculum Integration		
Subservient Approach to integration.		
Time		
Neutral Opinion Towards Curriculum Integration	Neutral Opinion Towards Curriculum Integration	
Reason for Neutral Opinion Toward Curriculum Integration		
Balanced Approach to Teaching	Positive Attitude Towards Curriculum Integration	
Positive Attitude Towards Curriculum Integration		
Reason for Positive Attitude		
Positive Professional Development	Professional Development	
Professional Development/Training		
Reason for Professional Development attitude		

Many of the participant statements provided specific examples of curriculum integration with core subjects. An example of one of these codes was ELA EXAMPLE OF CURRICULUM INTEGRATION with the quote of “Language in the choral classroom - text study to inform musical understanding and performance.” This quote demonstrated how an ELA classroom would perform a close read of a story to obtain its meaning. Other subjects mentioned were those of math, science, and the humanities. General statements regarding curriculum integration included, “I believe that what we teach in music is already full of math, language, science, and history.”

Integration of other art subjects, such as dance and visual art, into the music classroom was explored in this category. An example of this was “We can find multiple tools through subject integration. I could not grasp the vast knowledge of history until I could connect it to art, literature, and music.” Multiple subjects were utilized, both aspects of arts other than music were related to integration.

Table 5

CURRICULUM EXAMPLES USING INTEGRATION

Arts Example of Curriculum Integration	Arts Integration	Curriculum Examples Using Integration
Integrating Music Into Other Subjects		
Co-Planning with Other Teachers	Core Subject	
ELA Example of Curriculum integration		
General Example of Curriculum Integration		
Humanities Example of Curriculum Integration		
Math Example of Curriculum Integration		
Reason for Why Integrate Humanities		
Science Example of Curriculum Integration		
Social Aspects Concerning Curriculum Integration	Social Aspects Concerning Curriculum Integration	

During the process of the first cycle coding and the in-between cycles coding the processes of categorical and theoretical coding were used to narrow categories and codes into themes (Saldaña, 2016). The process of coding along, with memo writing in ATLAS:ti, helped develop a theory for the qualitative portion of this study. An example of a memo is:

This has very broad implications for reasons. But it relates to curriculum integration to life experiences. I read that all things in just happen. They do not come in neat little bundles like we classify our classes in school. In real life situations you need many subjects at once.

Q5.1 I believe that it is more engaging and interesting to include student's core subjects. It can give them a learning aid to use in other classes. It also shows how versatile and broad the subject of music is. It can be taught and practiced while at the same time being used as an aide for other areas of life in general.

It is much like that of Dewey (1900/1915) and Eisner (2009) stated that all subjects would eventually be related to life, that boundaries were artificial, and subject matter cannot be separated.

Theory

Completion of coding and review of data, memos, and notes, prompted the development of the following theory. The qualitative data corroborates that both subjects and levels of the teachers influence their attitudes regarding curriculum integration, but other factors can influence in their attitude. Thus, factors other than the grade-level taught and subject taught influence teachers' attitudes regarding curriculum integration. These factors may include years of experience and previous professional development/training, either in college or other professional development activities.

Merging Qualitative and Quantitative Data

Once both sets of data were completed, similarities and differences were merged. Similarities and differences were observed by reviewing qualitative data for each question and section of the survey, then comparing and searching for information in the qualitative data. The researcher also noted when the information from the qualitative

portion differed from that of the quantitative data in the study. By performing this process, final results were developed, which will be presented and discussed in Chapter 4 and Chapter 5.

CHAPTER 4

RESULTS

Introduction

The results for the research study survey were collected and used to determine if the level taught by music specialists (elementary school, middle school/junior high, high school) or the subject taught (general music, choir, band/orchestra) affected their attitudes regarding curriculum integration, including core curriculum and arts-based subjects into their music programs. The survey used in this study had four sections – defining curriculum integration, attitudes toward curriculum integration, questions on professional development, and two open response questions. Each of these sections were to answer research questions. Results for each section are reported, and survey results are reported by school district data and state data.

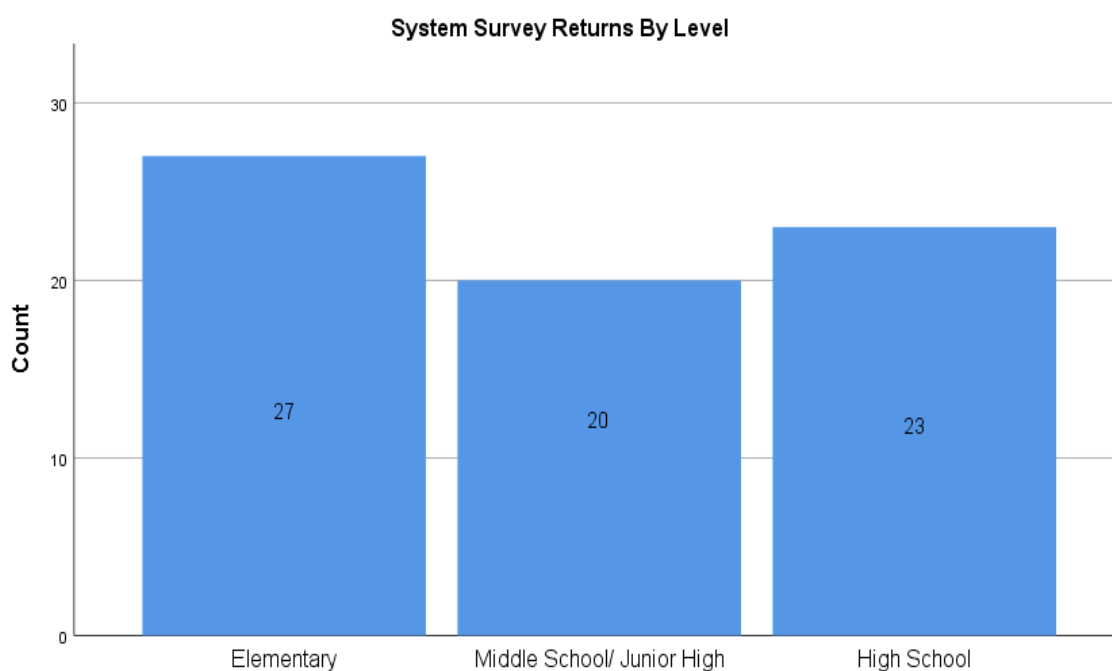
Restatement of Research Questions

1. Is there an effect of grade level, elementary, middle school, or high school, that the music specialists teach on their attitudes toward the teaching of the core curriculum in the music classroom?
2. Is there an effect of a music specialist chosen specialty area, general music, band/orchestra, or choir, on their attitude toward the teaching of core curriculum within their grade level?

School District Participant Demographic Information

This research study was conducted using two pools: first, a local school district and second, a statewide Tennessee Music Educators Association membership. The local school district provides a convenience sample while the membership of those in the Music Educators Association are more purposeful providing a larger pool of practicing music teachers in a state in the American. The school district had an approximate enrollment of 44,000 students and employed nearly 3,000 teachers. Of these teachers, 89 were music specialists teaching at all three levels, elementary, middle school/junior high, and high school, in the various specialty areas of general music, choir, and band/orchestra (L. Halford, personal communication March 1, 2018). The school district sample had $N = 70$ surveys returned out of 89 for a total 78% of the total population. Of this population, $N = 27$ were from elementary, $N = 20$ were from middle school/junior high, and $N = 23$ High school as shown in figure 1.

Figure 1

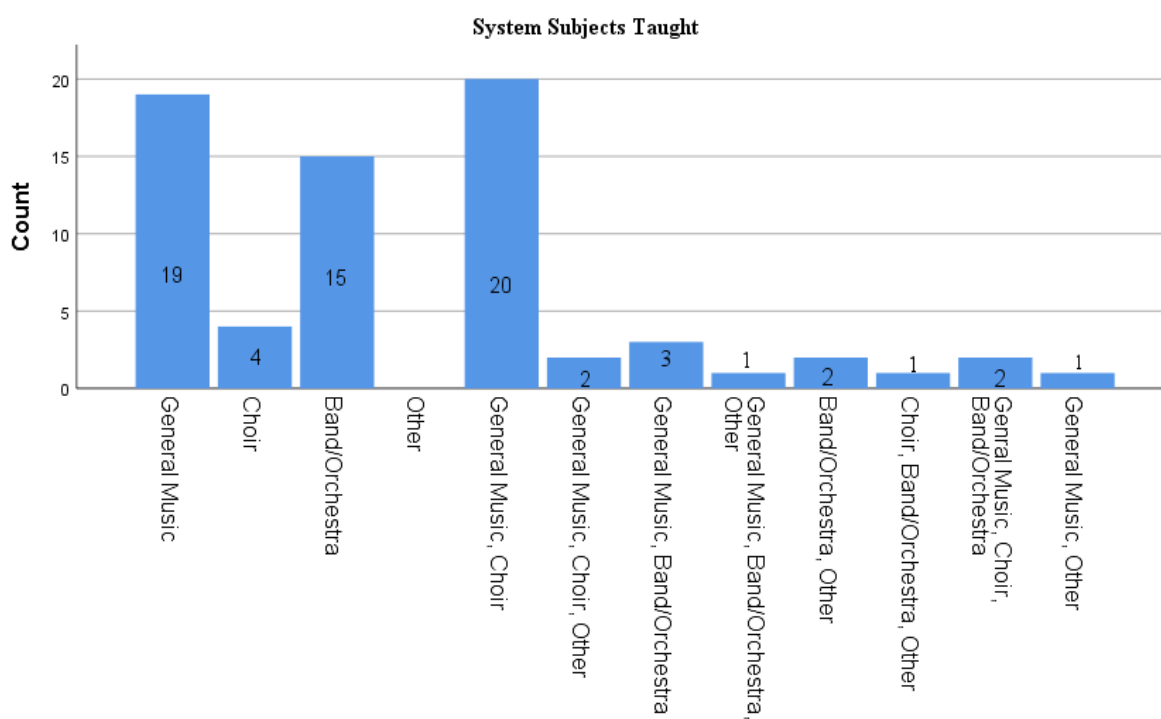
SCHOOL DISTRICT Survey Number Returns By Level

Numerous teachers in the district taught multiple music subject areas. In the survey, the participants selected all the subjects. The participants were instructed to select all the subjects that they taught. This prompted the development of more groupings based on subject matter, and many groupings consisted of smaller numbers. Some of these groupings, such as general music, band/orchestra, and other, only had one representative in the group. Representation was minimal in the choir teaching subject. Numerous choral teachers also taught general music, which made general music the

largest grouping in the system component of survey results. Figure 2 displays the complete results from the school district for subjects taught.

Figure 2

SCHOOL DISTRICT Survey Returns By Subject Taught



Of the seventy participants in this study, females $N = 42$ outnumbered males $N = 28$. This reflects the overall population of district's music specialist having more females than males. Differences in genders within areas taught is displayed in Table 6.

Table 6

Genders By Level Taught

		Middle School/		
	Elementary	Junior High	High School	Total
Male	6	10	12	28
Female	21	10	11	42
Total	27	20	23	70

There were six participants with 26-30 years of teaching experience. This was the smallest grouping. There were 16 participants with 11-15 years of experience, which was the largest grouping. Table 8 displays the system population based on years of experience

Table 7

Years Of Experience- Full System

	Numbers
0-5 Years Experience	15
6-10 Years Experience	7
11-15 Years Experience	16
16-20 Years Experience	8
21-25 Years Experience	10
26-30 Years of Experience	6
More Than 30 Years of Experience	8
Total	70

Table 8 displays the years of experience by school level taught and Table 10 displays the breakdown by subject taught.

Table 8

<i>Years Of Experience By Level Taught</i>				
	Elementary	Middle School/ Junior High	High School	Total
0-5 Years Experience	9	3	3	15
6-10 Years Experience	5	0	2	7
11-15 Years Experience	5	7	4	16
16-20 Years Experience	4	1	3	8
21-25 Years Experience	2	6	2	10
26-30 Years of Experience	1	1	4	6
More Than 30 Years of Experience	1	2	5	8
Total	27	20	23	70

There were $N = 30$ participants from the school district with a bachelor's degree, $N = 37$ with a master's degree, and $N = 3$ with a doctoral degree. The categorization of the education by levels taught is shown in Table 9 and the categorization of education by subjects taught.

Table 9

Education Level of Participant by Level Taught

	Middle School/ Elementary		High School	Total
Bachelor's Degree	17	7	6	30
Master's Degree	10	12	15	37
Doctoral Degree	0	1	2	3
Total	27	20	23	70

Participant ethnicity is also detailed. There were $N = 3$ African-American participants from the research district, $N = 2$ Hispanic participants from the research district, $N = 59$ White/Caucasian participants from the research district, and $N = 6$ participants that chose to identify as Other. Ethnicity breakdowns are displayed in Table 10.

Table 10

Participants Ethnicity by Level Taught

	Middle School/		High	
	Elementary	Junior High	School	Total
African-American	0	3	0	3
Hispanic	1	0	1	2
White/Caucasian	23	14	22	59
Other	3	3	0	6
Total	27	20	23	70

The school district results for the primary race at the school the participant taught at was $N = 7$ were African-American schools, $N = 4$ had the primary race of the students taught as Hispanic, and $N = 59$ had the primary race taught as White/ Caucasian. These results were not further detailed and are not utilized in the study.

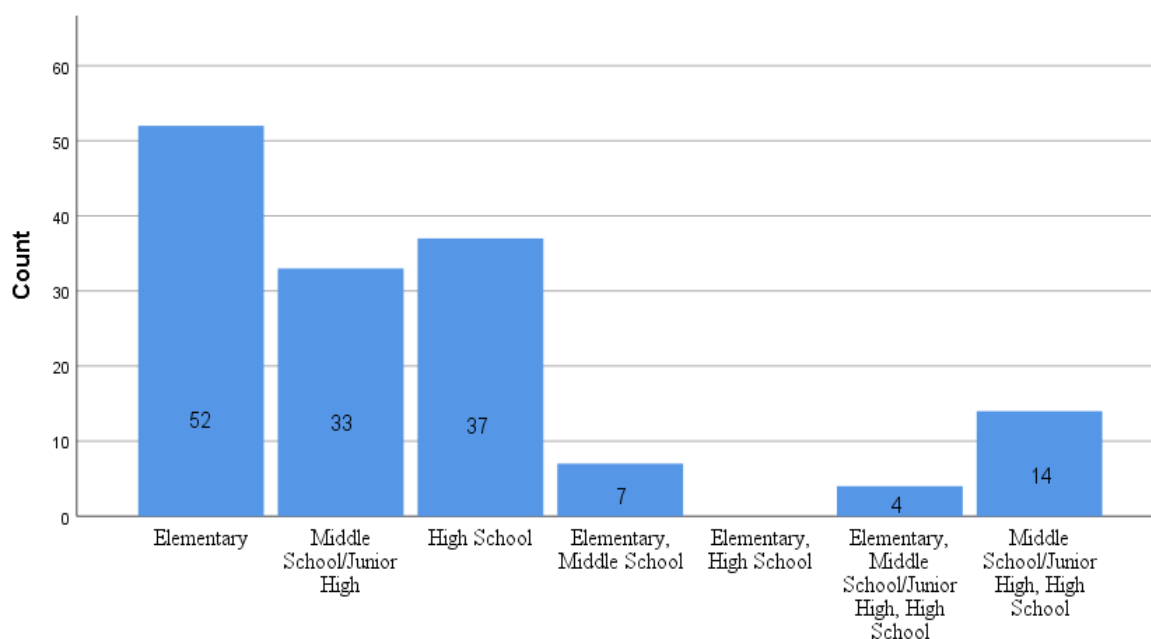
State Participant Demographic Information

The second population sample consisted of TNMEA members, a professional music association that is Tennessee's representative body for the National Association for Music Education (NAfME). This organization represents the interests of music educators of all types. TNMEA had 1,302 active members, but its records did not indicate specific areas of teaching, such as general music, choir, or band/orchestra, nor did TNMEA notate the level of school, such as elementary school, middle school, high school (R. Meers,

personal communication, February 2, 2017). TNMEA represented elementary school, middle school, and high school music specialists from Tennessee. There were $N = 147$ surveys returned from TNMEA members, which represented 11.3% of the organization's membership. There was a higher return rate from the research district, which allowed the possibility of predicting trends from the sample population. Participants from the research district only taught at one school level, whereas some TNMEA participants taught at multiple school levels. Figure 3 displays the breakdown of the levels taught by the state music teachers.

Figure 3

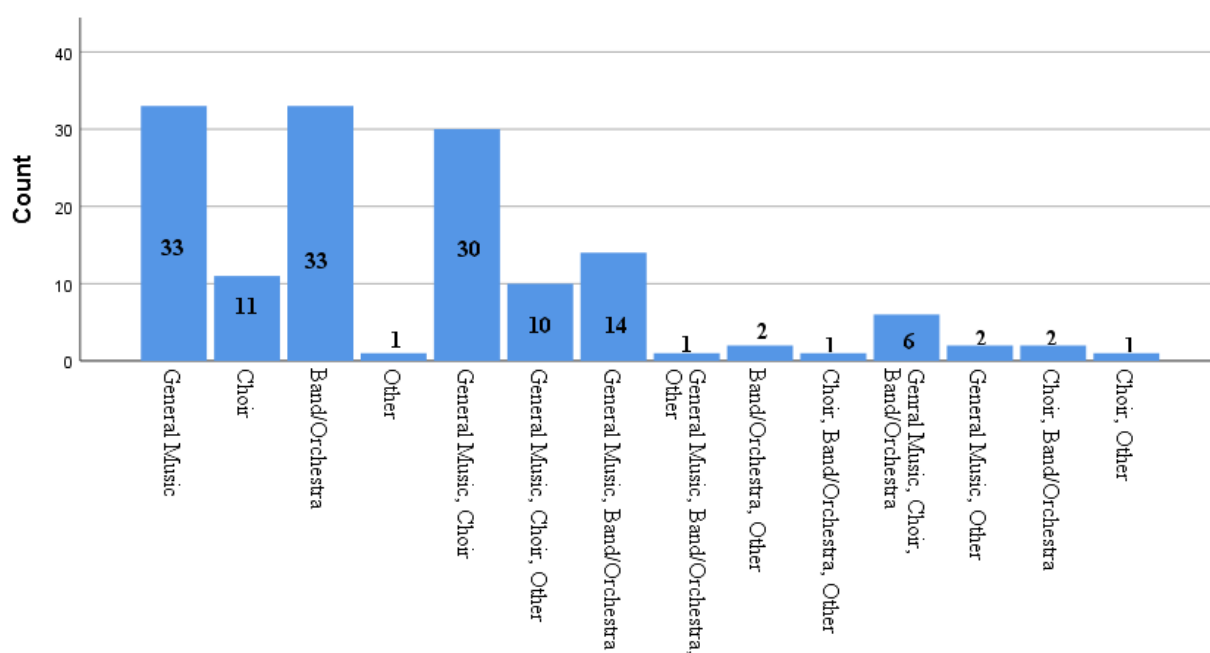
State Survey Number Returns By Level



In Tennessee, numerous teachers taught more than one subject. All survey participants were allowed to choose all subjects they taught. By allowing this option, more groupings of subject matter were created, with many groupings having smaller numbers. Some of these groupings such as the general music, band/orchestra, and other, only had one representative per group. Figure 4 details the complete results from the system for subjects taught.

Figure 4

State Survey Returns By Subject Taught



There were $N = 84$ female participants and $N = 63$ male participants. Differences in gender among levels taught is displayed in Table 15.

Table 11

Genders By Level Taught

	Elementary	Middle School/Junior High	High School	Elementary, Middle School	Elementary, Middle School/Junior High, High School	Middle School/Junior High, High School	School	Total
Male	10	17	25	1		1	9	63
Female	42	16	12	6		3	5	84
Total	52	33	37	7		4	14	147

The years of experience level displayed a narrow range statewide. There were 17 teacher participants with 16-20 years of experience and 24 teachers with 21-25 years of experience as seen in Table 12. Table 13 displays the years of experience breakdown by school level taught for Tennessee music specialists.

Table 12

Years Of Experience- State

	Numbers
0-5 Years Experience	23
6-10 Years Experience	23
11-15 Years Experience	23
16-20 Years Experience	17
21-25 Years Experience	24
26-30 Years of Experience	18
More Than 30 Years of Experience	19
Total	147

Table 13

Years Of Experience By Level Taught

	Elementary	Middle School/Junior High	High School	Elementary, Middle School	Elementary, Middle School/Junior High	High, High School	Middle School/Junior High, High School	Total
0-5 years	12	3	4	0		3	1	23
6-10 years	7	2	9	1		0	4	23
11-15 years	7	8	5	1		0	2	23
16-20 years	6	5	5	0		0	1	17
21-25 years	8	7	2	4		0	3	24
26-30 years	7	2	7	0		0	2	18
More than 30 years	5	6	5	1		1	1	19
Total	52	33	37	7		4	14	147

Participants' education levels were also noted. There were $N = 69$ teachers from the state population samples with bachelor's degrees, $N = 69$ teachers from the state

population sample with master's degrees, and $N = 9$ teachers from the state population sample with doctoral degrees. The categorizations by levels taught and subjects taught are displayed in Table 14.

Table 14

Education Level By Level Taught

	Elementary	Middle School/Junior High	High School	Elementary, Middle School	Elementary, Middle School/Junior High, High School	Middle School/Junior High, High School	School	Total
Bachelor's Degree	28	17	18	0		3	3	69
Master's Degree	23	15	15	7		1	8	69
Doctoral Degree	1	1	4	0		0	3	9
Total	52	33	37	7		4	14	147

Participants' ethnicities were also noted. There were $N = 7$ African-American participants, $N = 2$ Asian participants, $N = 6$ Hispanic participants, $N = 125$ White/Caucasian participants, and $N = 7$ participants who identified themselves as Other.

Ethnicity Results for School District and State

Results of any ethnic data were not used for the purposes of this research. Due to the fact that 84% of the research district's participants identified as White/Caucasian and 85% of state participants identified as White/Caucasian, any results related to ethnicity were likely to be skewed.

Defining Definitions of Curriculum Integration of Survey

The purpose of the first section of the survey was for the participants to choose from examples based on Bresler's (1995) subservient and co-equal models. These questions created a baseline to for the researcher to interpret how the participants viewed specific examples of curriculum integration. The co-equal model stipulates that all subjects being integrated are afforded equal time and emphasis on all subjects represented in the lesson. In the subservient model, one or more subjects is minimized for the purpose of aiding the understanding of another subject. In subservient roles, the learner is not expected to gain any new information regarding music, thus music becomes secondary.

The co-equal model stipulates that all subjects being integrated are afforded equal time and emphasis on all subjects represented in the lesson. In the subservient model, one or more subjects is minimized for the purpose of aiding the understanding of another subject. In subservient roles, the learner is unable to gain any new information regarding music, thus music becomes secondary. Five questions relating to the co-equal model treated music and other core subjects as equals. Four questions relating to the subservient model utilized music in a supporting role. The co-equal examples are shown in Table 15 and the subservient examples are shown in Table 16.

Table 15

Co-Equal Questions From Defining Definitions of Curriculum Integration Of Survey

Question Number	Survey Model Type	Question
2.4	Co-Equal	Exploring a blues song to examine its musical elements, its use of irony, and the role of blues in society.
2.5	Co-Equal	Comparing the painting, “Mother and Child” by Picasso with the Spanish song “A La Nanita Nana” to examine how the creators used artistic elements to create expressed emotions.
2.7	Co-Equal	Presenting musical instruments of the Ancient Silk Road in general music while a classroom a teacher simultaneously explores historical/cultural practices of the Silk Road during social studies.
2.9	Co-Equal	Examining and comparing the ritual “This Train is Bound for Glory” and the poem “Freedom Train” by Langston Hughes for their cultural and historical significance.
2.10	Co-Equal	Playing Copland's "Fanfare for the Common Man" while a classroom a teacher simultaneously explores historical/cultural practices of the home-front during World War II.

Table 16

Subservient Questions From Defining Definitions of Curriculum Integration Of Survey

Question Number	Survey Model Type	Question
2.2	Subservient	Using music to teach multiplication facts or the order of U. S. presidents.
2.3	Subservient	Singing a song about earth day and the importance of recycling materials during a science lesson.
2.6	Subservient	Marching in place and playing rhythm sticks while singing the song "This Land is Your Land."
2.8	Subservient	Playing instruments while singing a song to memorize the order of the planets.

Analysis of school district results.

A one-way ANOVA was conducted on each question using demographic results of level taught, subject taught, gender, years of experience, and education level. After the one-way ANOVA was completed, a two-way ANOVA was conducted comparing the participants' school level and subject taught. Descriptive data was used to determine which demographic categories held meaningful differences for each question in the first section on defining curriculum integration attitudes. The primary goal of this section of the survey was to determine if the different levels or subjects defined curriculum integration any differently based on the examples provided in the question. Other factors, such as participants' gender, years of experience, and education level were considered. A

meaningful difference was determined by a significance level of $p < 0.01$ on the one and two-way ANOVA.

Question 2.5 (Table 15) was a co-equal example based on Bresler's styles that placed music and art on equal terms that resulted in a difference when a two-way ANOVA was conducted with the subjects and level taught. The full group had a score of $M = 1.33$ with a $SD = .531$. Additionally, the subgroups of subjects taught, and levels taught had a mean range from 1.00 to 3.00, as shown in Table 17.

Table 17

Mean Scores by Subject and Level Taught For Question 2.5

Subject Taught	Level Taught	<i>M</i>	<i>SD</i>	<i>N</i>
General Music	Elementary	3.82	.405	11
	Middle School/ Junior High	4.00	.	1
	High School	3.71	.488	7
	Total	3.79	.419	19
Choir	Middle School/ Junior High	2.50	.707	2
	High School	4.00	.000	2
	Total	3.25	.957	4
Band/Orchestra	Elementary	4.00	.000	3
	Middle School/ Junior High	3.50	.548	6
	High School	3.83	.408	6
	Total	3.73	.458	15
General Music, Choir	Elementary	3.75	.452	12
	Middle School/ Junior High	3.83	.408	6
	High School	3.50	.707	2
	Total	3.75	.444	20
General Music, Choir, Other	Elementary	3.00	.	1
	Middle School/ Junior High	4.00	.	1
	Total	3.50	.707	2
General Music, Band/Orchestra	Middle School/ Junior High	2.00	.	1
	High School	4.00	.000	2
	Total	3.33	1.155	3

General Music,	Middle School/ Junior High	3.00	.	1
Band/Orchestra, Other	Total	3.00	.	1
Band/Orchestra, Other	Middle School/ Junior High	3.00	.	1
	High School	3.00	.	1
	Total	3.00	.000	2
Choir, Band/Orchestra,	High School	3.00	.	1
Other	Total	3.00	.	1
General Music, Choir,	Middle School/ Junior High	4.00	.	1
Band/Orchestra	High School	4.00	.	1
	Total	4.00	.000	2
General Music, Other	High School	4.00	.	1
	Total	4.00	.	1
Total	Elementary	3.78	.424	27
	Middle School/ Junior High	3.45	.686	20
	High School	3.74	.449	23
	Total	3.67	.531	70

Table 18 displays the interaction of subject and level had an effect of

$F(9, 48) = 3.053, p = .006$.

Table 18

School District two-way ANOVA results on Subject and Level Taught For Question 2.5

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Corrected Model	9.961 ^a	21	.474	2.401	.006
Intercept	328.362	1	328.362	1662.311	.000
Subject	4.231	10	.423	2.142	.039
Level Taught	1.026	2	.513	2.597	.085
Subject * Level	5.428	9	.603	3.053	.006
Error	9.482	48	.198		
Total	963.000	70			
Corrected Total	19.443	69			
a. R Squared = .512 (Adjusted R Squared = .299)					

Following the completion of the two-way ANOVA, a Pearson Product-Moment Correlation was conducted with the question that the answer was significant. The variables were subjects taught and levels taught. There was correlation was a correlation of $r = .126$ for the interaction between the question and the subject taught. The interaction level between the question and level taught had a score of $r = .042$. A linear regression was conducted on the same variables as the correlation in order to determine the direction, whether it was positive or negative, towards curriculum integration. The

results did not indicate any significant answers. A variance occurred between the subjects taught and levels taught. Tables 19 show participants' answers by subject taught. There were $N = 49$ participants that strongly agreed in both areas (subjects taught, levels taught). This accounts for 75.7% of the survey population. Additionally, 27.1% agreed. Thus, those who strongly agreed or agreed accounted for 97.1% of the survey population. Two participants who taught choir and band/orchestra with general music at the middle school/junior high level somewhat disagreed.

Table 19

Answers for Question 2.5 By Subject Taught

	General Music	Choir	Band/Orchestra	General Music, Choir	General Music, Choir, Other	General Music, Band/Orchestra	General Music, Band/Orchestra, Other	Band/Orchestra, Other	Choir, Band/Orchestra, Other	General Music, Choir, Band/Orchestra	General Music, Other	Total
Strongly Agree	15	2	11	15	1	2	0	0	0	2	1	49
Somewhat Agree	4	1	4	5	1	0	1	2	1	0	0	19
Somewhat Disagree	0	1	0	0	0	1	0	0	0	0	0	2
Total	19	4	15	20	2	3	1	2	1	2	1	70

Table 20 displays the answers for question 2.5 by level taught. It should be noted that the only responses in the disagree range were from the middle school/junior high level.

Table 20

Answers for Question 2.5 By Level Taught

	Middle School/ Elementary Junior High High School			Total
Strongly Agree	21	11	17	49
Somewhat Agree	6	7	6	19
Somewhat Disagree	0	2	0	2
Total	27	20	23	70

Analysis of state results.

Question 2.3's (Table 16) example was subservient according to Bresler's styles. Results for Question 2.3 were $N = 147$ with a $M = 3.01$ with a $SD = .891$. It should be noted that there are more levels of state data compared to data from the research district because music specialists teach at many different levels in Tennessee. When the levels taught were isolated, the mean range was $M = 2.75$ to $M = 4.00$, as show in Table 21.

Table 21

Means By Level For State

	<i>N</i>	<i>Mean</i>	<i>SD</i>
Elementary	52	2.75	.883
Middle School/Junior High	33	2.88	.857
High School	37	3.27	.871
Elementary, Middle School	7	4.00	.000
Elementary, Middle School/Junior High, High School	4	3.75	.500
Middle School/Junior High, High School	14	2.93	.829
Total	147	3.01	.891

The one-way ANOVA results were $F(5, 142) = 4.426, p = .001$ as shown in

Table 22.

Table 22

One-Way ANOVA By Levels For Question 2.3

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Between Groups	15.732	5	3.146	4.426	.001
Within Groups	100.241	141	.711		
Total	115.973	146			

A Pearson Product-Moment Correlation was conducted on question 2.3 based on the question and level taught. The correlation resulted in a moderate interaction between

question and gender with a score of $r = .181$, $p = .028$ as shown in Table 24. Figure 5 displays the scatter plot by level taught.

Table 23

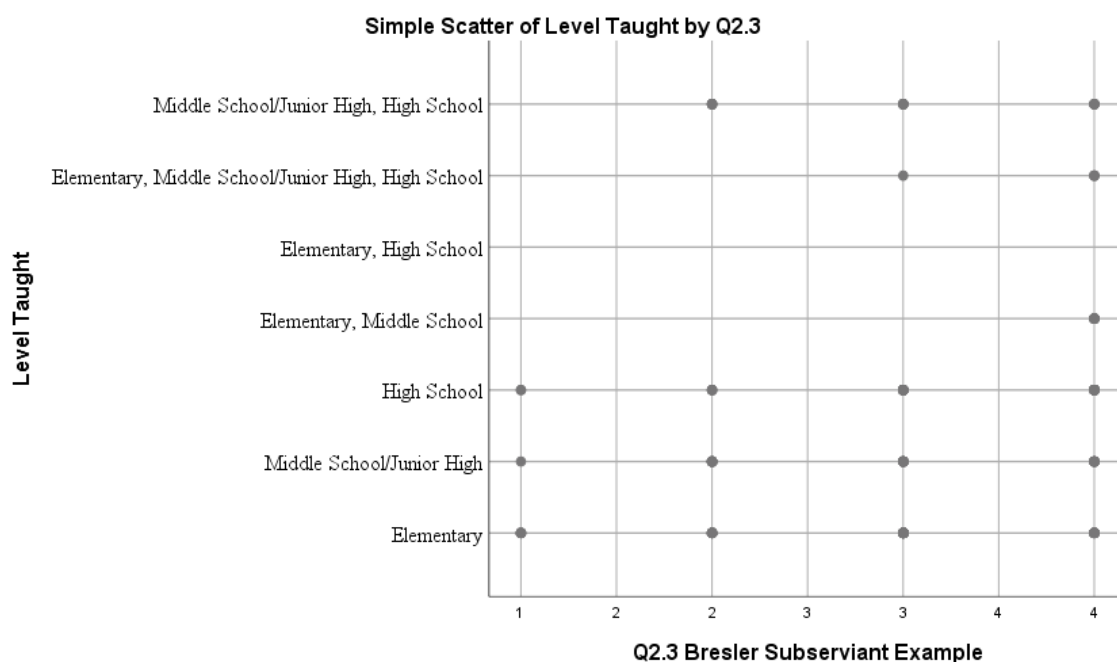
Pearson Time-Moment Correlation For Question 2.3 With Subject And Levels Taught

		Q2.3	Level Taught
Q2.3	Pearson Correlation	1	.181*
	Sig. (2-tailed)		.028
	N	147	147
Level Taught	Pearson Correlation	.181*	1
	Sig. (2-tailed)	.028	
	N	147	147

*. Correlation is significant at the 0.05 level (2-tailed).

Figure 5

Scatter Plot Question 2.3 by level Taught



A linear regression was conducted using the same variables. The linear regression displayed independence of the residuals as based on the Durbin-Watson statistic of 1.585. The R^2 for the overall model was 3.3% with the adjusted R^2 of 2.6% which is low effect size according to Cohen. The regression had a score of $F(1, 145) = 4.925$, $p = .028$ as shown in Table 24.

Table 24

Linear Regression For Level Taught And Question 2.3

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Regression	3.809	1	3.809	4.925	.028 ^b
Residual	112.163	145	.774		
Total	115.973	146			

a. Dependent Variable: Q2.3

b. Predictors: (Constant), Level Taught

Question 2.4 (Table 15) was co-equal example based on Bresler's styles in which music and ELA were used together. Question 2.4 displayed significant results in areas: level taught, subject taught, and gender. The full group had a score of $M = 3.80$, which places the results for the population sample between strongly agree and somewhat agree. The range for the levels was a score of $M = 3.59$ to $M = 4.00$. The range scores for the subjects taught on question 2.4 ranged from $M = 3.73$ to $M = 4.00$, as shown in Table 25. It should be noted that there were more variances in the subject grouping in the state level as opposed to the research district. Finally, the gender displayed a similar range to that of the levels taught, with a range of $M = 1.00$ to $M = 2.17$.

Table 25

Mean and Standard Deviation By Subject Taught For Question 2.4

	<i>N</i>	<i>M</i>	<i>SD</i>
General Music	33	3.91	.292
Choir	11	3.73	.467
Band/Orchestra	33	3.79	.415
Other	1	4.00	.
General Music, Choir	30	3.83	.379
General Music, Choir, Other	10	3.90	.316
General Music, Band/Orchestra	14	3.71	.469
General Music, Band/Orchestra, Other	1	4.00	.
Band/Orchestra, Other	2	4.00	.000
Choir, Band/Orchestra, Other	1	4.00	.
General Music, Choir, Band/Orchestra	6	2.83	1.472
General Music, Other	2	4.00	.000
Choir, Band/Orchestra	2	4.00	.000
Choir, Other	1	4.00	.
Total	147	3.80	.496

A one-way ANOVA resulted in score of $F(5, 141) = 4.426, p = .001$ based on the levels taught, as shown in Table 26. A Pearson Product-Moment Correlation was conducted on question 2.4 based on the question and level taught. The correlation resulted in a small interaction between question and gender with a score of $r = .010, p = .902$.

Table 26

One-Way ANOVA By Level Taught For Question 2.4

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Between Groups	3.368	5	.674	2.922	.015
Within Groups	32.509	141	.231		
Total	35.878	146			

A linear regression was conducted using the same variables. The linear regression displayed independence of the residuals as based on the Durbin-Watson statistic of 1.783. The R^2 for the overall model was 0.0%, with the adjusted R^2 of -.7%. The regression had a score of $F(1, 145) = .015$, $p = .902$.

A one-way ANOVA by subject taught resulted in score of $F(13, 133) = 4.426$, $p = .008$ as shown in Table 27. A Pearson Product-Moment Correlation was conducted on question 2.4 based on the question and subject taught. The correlation resulted in a small interaction between question and gender with a score of $r = -.169$, $p = .05$.

Table 27

One-Way ANOVA By Subject Taught For Question 2.4

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Between Groups	6.696	13	.515	2.348	.008
Within Groups	29.181	133	.219		
Total	35.878	146			

A linear regression was conducted using the same variables. The linear regression displayed independence of the residuals as based on the Durbin-Watson statistic of 1.843. The R^2 for the overall model was 2.8% with the adjusted R^2 of 2.2%. The regression had a score of $F(1, 145) = 4.246, p = .041$ as shown in Table 28.

Table 28

Linear Regression By Subject Taught For Question 2.4

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Regression	1.021	1	1.021	4.246	.041 ^b
Residual	34.857	145	.240		
Total	35.878	146			

a. Dependent Variable: Q2.4
b. Predictors: (Constant), Subject Taught

Significant results were indicated for question 2.4 relating to gender. A one-way ANOVA by subject taught resulted in score of $F(1, 145) = 15.422, p < .001$, as shown in Table 29.

Table 29

One-Way ANOVA By Gender For Question 2.4

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Between Groups	3.449	1	3.449	15.422	.000
Within Groups	32.429	145	.224		
Total	35.878	146			

A Pearson Product-Moment Correlation was conducted on question 2.4 based on the question and subject taught. The correlation resulted in a moderate interaction between question and gender with a score of $r = -.310, p = .01$. A linear regression was conducted using the same variables. The linear regression displayed independence of the residuals as based on the Durbin-Watson statistic of 1.768. The R^2 for the overall model was 9.6% with the adjusted R^2 of 9.0%. The regression had a score of $F(1, 145) = 15.422, p < .001$ as shown in Table 30.

Table 30

Linear Regression By Gender For Question 2.4

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Regression	3.449	1	3.449	15.422	.000 ^b
Residual	32.429	145	.224		
Total	35.878	146			

a. Dependent Variable: Q2.4

b. Predictors: (Constant), Gender

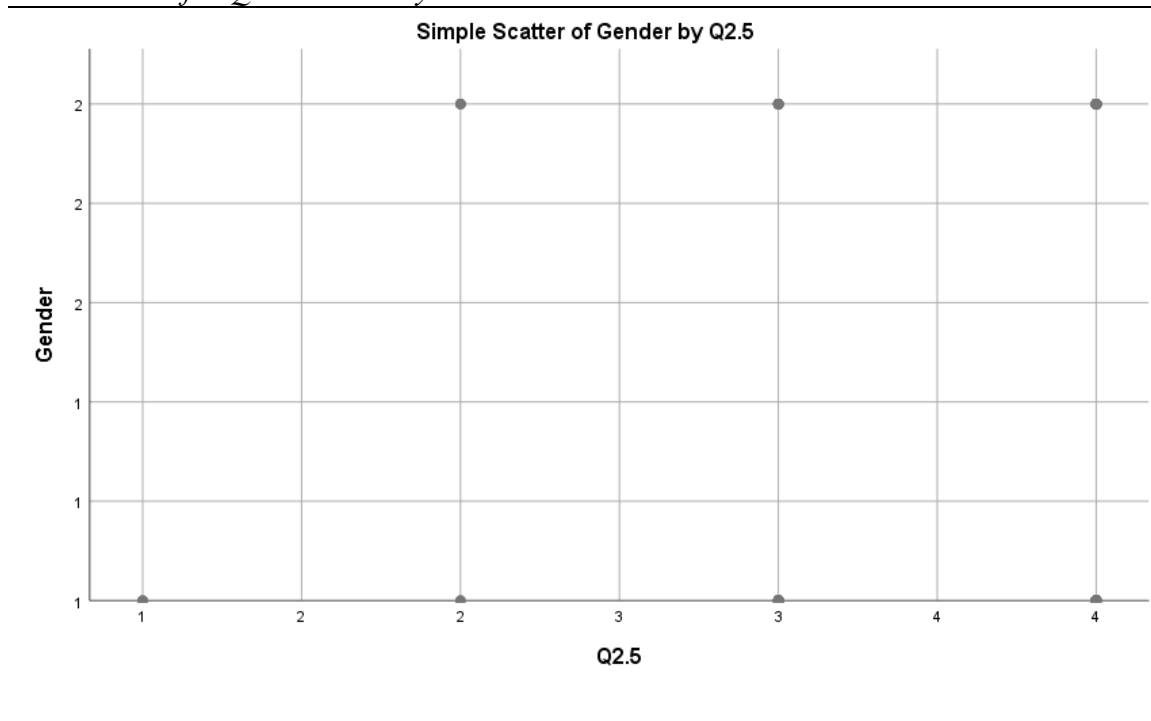
Question 2.5 (Table 15) was co-equal, based on music and art. The full group had a $M = 3.63$ with an $SD = .631$, while males had a score below the group mean with a $M = 3.48$, and a $SD = .715$. Females were above the group mean with a score of $M = 3.75$ with an $SD = .535$. A one-way ANOVA resulted in score of $F(1, 145) = 7.056, p = .009$, based on the level taught, as shown in Table 31. A Pearson Product-Moment Correlation was conducted on question 2.4 based on the question and level taught. The correlation resulted in a small interaction between question and gender with a score of $r = -.215$ with a $p < .001$.

Table 31

<i>One-Way ANOVA By Gender For Question 2.5</i>					
	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Between Groups	2.699	1	2.699	7.056	.009
Within Groups	55.464	145	.383		
Total	58.163	146			

Figure 6

Scatter Plot for Question 2.5 by Gender



A linear regression was conducted using the same variables. The linear regression displayed independence of the residuals as based on the Durbin-Watson statistic of 1.963. The R^2 for the overall model was 4.6% with the adjusted R^2 of 4.0%. The regression had a score of $F(1, 146) = 7.056, p = .009$, as shown in Table 32.

Table 32

Linear Regression By Gender For Question 2.5

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Regression	2.699	1	2.699	7.056	.009 ^b
Residual	55.464	145	.383		
Total	58.163	146			

a. Dependent Variable: Q2.5

b. Predictors: (Constant), Gender

Question 2.5 (Table 15) displayed results in the two-way ANOVA between level taught and subject taught. The interaction of subject and level taught had an effect of $F(15, 113) = 1.016, p < .001$ as shown in Table 33.

Table 33

Two-Way ANOVA By Subject And Level Taught For Question 2.5

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Corrected Model	25.204 ^a	33	.764	2.619	.000
Intercept	73.736	1	73.736	252.804	.000
Subject	5.022	13	.386	1.324	.209
Level	.789	5	.158	.541	.745
Subject * Level	15.234	15	1.016	3.482	.000
Error	32.959	113	.292		
Total	333.000	147			
Corrected Total	58.163	146			

Following the completion of the two-way ANOVA, a Pearson Product-Moment Correlation was conducted with question 2.5. The variables were subjects taught and

level taught. The correlation resulted in a small interaction between level and subject taught, with a score of $r = -.182, p = .027$. A linear regression followed the correlation and displayed independence of the residuals as based on the Durbin-Watson statistic of 1.990. The R^2 for the overall model was 1.6% with the adjusted R^2 of .2%. According to Cohen (1988), this is a low effect size. The regression had a score of $F(2,144) = 1.139, p = .323$.

Question 2.7 (Table 15) was a co-equal example based on Bresler's styles based on Bresler's styles that combined music and social studies based on social studies. This question had four areas of significance, level taught, subject taught, gender, and the two-way ANOVA based on subject and level taught. The full group score of $M = 3.61$ with a $SD = .647$ was recorded. The level taught score ranged from $M = 2.75$ to $M = 4.00$. The mean score of subjects taught ranged from $M = 2.00$ to $M = 4.00$. Males had score of $M = 3.46$ compared to the female score of $M = 3.71$ based on gender. For a complete reporting the mean scores for all of these areas see Appendix E.

A one-way ANOVA based on level taught resulted in score of $F(5, 141) = 3.149, p = .010$ as shown in Table 34. A Pearson Product-Moment Correlation was conducted on question 2.7 based on the question and level taught. The correlation resulted in a small interaction between question and gender with a score of $r = .201$ and a $p = .015$.

Table 34

One-Way ANOVA By Level Taught For Question 2.7

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Between Groups	6.138	5	1.228	3.149	.010
Within Groups	54.977	141	.390		
Total	61.116	146			

A linear regression was conducted using the same variables. The linear regression displayed independence of the residuals as based on the Durbin-Watson statistic of 1.762. The R^2 for the overall model was 4.0%, with the adjusted R^2 of 3.4%. The regression had a score of $F(1, 145) = 6.094, p = .015$.

The two-way ANOVA based on subject and level taught displayed significance for question 2.7. The areas of level taught and subject taught have been previously shown to have significance independent of one another. A two-way ANOVA between level taught and subject taught. The interaction of subject and level taught had an effect of $F(15, 113) = 2.367, p = .005$, as shown in Table 35.

Table 35

Two-Way ANOVA By Subject And Level Taught For Question 2.7

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Corrected Model	26.155 ^a	33	.793	2.562	.000
Intercept	76.200	1	76.200	246.296	.000
Subject	6.301	13	.485	1.567	.105
Level	3.545	5	.709	2.292	.050
Subject * Level	10.987	15	.732	2.367	.005
Error	34.960	113	.309		
Total	347.000	147			
Corrected Total	61.116	146			

Following the completion of the two-way ANOVA, a Pearson Product-Moment Correlation was conducted with question 2.7. Subjects taught and level taught were the variables. The correlation resulted in a moderate interaction between the question and level taught, with a score of $r = .201, p = .015$. Another correlation was found between subject and level taught with a score of $r = .182, p = .027$. A linear regression followed the correlation and displayed independence of the residuals as based on the Durbin-Watson statistic of 1.787. The R^2 for the overall model was 5.2%, with the adjusted R^2 of 3.9%. According to Cohen (1988), this is a low effect size. The regression had a score of $F(2,144) = 3.933, p = .022$, as shown in Table 36.

Table 36

Linear Regression By Subject And Level Taught For Question 2.7

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Regression	3.165	2	1.583	3.933	.022 ^b
Residual	57.950	144	.402		
Total	61.116	146			

a. Dependent Variable: Q2.7

b. Predictors: (Constant), Level Taught, Subject Taught

Question 2.9 (Table 15) was a co-equal question that matched music with ELA and social studies, and this question showed significance regarding gender. The mean score for the full group was $M = 3.66$ with a $SD = .625$. Males had a score of $M = 3.48$ with a $SD = .780$, while females scored a $M = 3.80$ with a $SD = .433$. A one-way ANOVA based on gender resulted in a score of $F(1, 145) = 3.719, p = .002$ as shown in Table 37. A Pearson Product-Moment Correlation was conducted on question 2.4 based on the question and level taught. The correlation resulted in a small interaction between question and gender with a score of $r = -.255$ with a $p < .001$.

Table 37

One-Way ANOVA By Gender For Question 2.9

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Between Groups	3.719	1	3.719	10.123	.002
Within Groups	53.274	145	.367		
Total	56.993	146			

A linear regression was conducted using the same variables. The linear regression displayed independence of the residuals as based on the Durbin-Watson statistic of 2.104. The R^2 for the overall model was 6.5%, with the adjusted R^2 of 5.9%. The regression had a score of $F(1, 145) = 3.719, p = .002$ as shown in Table 38.

Table 38

Linear Regression By Gender For Question 2.9

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Regression	3.719	1	3.719	10.123	.002 ^b
Residual	53.274	145	.367		
Total	56.993	146			

a. Dependent Variable: Q2.9

b. Predictors: (Constant), Gender

Curriculum Integration Section of the Survey

This section of the survey measured both positive and negative attitude responses regarding curriculum integration; it measured the participants perception on their ability to integrate other subjects into the music curriculum. This section was comprised of 11 questions about the participants' attitudes regarding curriculum integration. Table 39 displays the questions that measure the seven positive attitudes regarding curriculum integration.

Table 39

Positive Perspective Questions From Attitudes Section of Curriculum Integration Of Survey

Question Number	Survey Model Type	Question
3.2	Positive	I feel it is important for students to experience integrated arts curricula.
3.5	Positive	I enjoy helping students make connections across disciplines.
3.6	Positive	I feel it is important for each subject included in an integrated unit to have an equal amount of time for exploration.
3.7	Positive	In general, my school is supportive of integrated teaching involving the arts.
3.8	Positive	I am free to use integrated teaching strategies as I see fit.
3.9	Positive	Teacher collaboration is an important component of teaching integrated lessons.
3.10	Positive	Self-directed planning time during the school day is an important component of teaching integrated lessons.

Table 40 displays the questions that measure the two negative attitude perspectives toward curriculum integration. The two questions that measure the participants' perceived ability toward curriculum integration is shown in Table 41.

Table 40

Negative Perspective Questions From Attitudes Section of Curriculum Integration Of Survey

Question Number	Survey Model Type	Question
3.11	Negative	I feel constrained by curricular integrated teaching.
3.12	Negative	I feel that I don't have enough time to incorporate integrated teaching.

Table 41

Ability To Integrate Questions From Attitudes Section of Curriculum Integration Of Survey

Question Number	Survey Model Type	Question
3.3	Ability	I am confident in my ability to integrate music with non-arts subjects, such as language arts, science, math, or history.
3.4	Ability	I am confident in my ability to integrate music with non-arts subjects, such as language arts, science, math, or history.

Analysis of school district results.

Question 3.8 (Table 39) was a positive attitude example that asked the participant about how free they felt to integrate. This question had two areas of significance, subject taught, and the two-way ANOVA based on subject and level taught. The full group score of $M = 3.70$ with a $SD = .548$ was recorded. The mean score in the area of subjects taught ranged from $M = 1.00$ to $M = 4.00$. For a complete reporting the mean scores see Appendix E.

A one-way ANOVA based on level taught resulted in score of $F(10, 59) = 4.701, p < .001$, as shown in Table 42. A Pearson Product-Moment Correlation was conducted on question 2.4 based on the question and level taught. The correlation resulted in a small interaction between question and subject taught with a score of $r = .120$ and a $p = .321$.

Table 42

One-Way ANOVA By Subject For Question 3.8

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Between Groups	9.179	10	.918	4.701	.000
Within Groups	11.521	59	.195		
Total	20.700	69			

A linear regression was conducted using the same variables. The linear regression displayed independence of the residuals as based on the Durbin-Watson statistic of 2.332.

The R^2 for the overall model was 1.4%, with the adjusted R^2 of 0.0%. The regression had a score of $F(1, 68) = 1.000, p = .321$.

Question 3.10 (Table 39) was a positive perspective that asked the participant about the importance of self-directed planning time. The full group score of $M = 1.40$ with a $SD = .710$ was recorded. There were additional differences based on gender. Males scored $M = 3.39$ and a $SD = .832$, compared to females with a score of $M = 3.74$ and a $SD = .587$.

Gender demonstrated significance as a component of question 3.12 (Table 40). Males had a score of $M = 2.36$ with a $SD = .951$, while females scored $M = 3.02$ and a $SD = .811$. Conversely, the full group score was $M = 2.76$ and a $SD = .924$. Table 42 shows a one-way ANOVA based on subject taught resulted in score of $F(1, 68) = 9.877, p = .002$. A Pearson Product-Moment Correlation was conducted on question 3.12 based on the question and level taught. The correlation resulted in a moderate interaction between question and gender with a score of $r = .356$ and a $p = .002$.

Table 43

One-Way ANOVA By Gender For Question 3.12

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Between Groups	7.467	1	7.467	9.877	.002
Within Groups	51.405	68	.756		
Total	58.871	69			

A linear regression was conducted using the same variables. The linear regression displayed independence of the residuals as based on the Durbin-Watson statistic of 2.672. The R^2 for the overall model was 12.7%, with the adjusted R^2 of 11.4%. As shown in Table 44, the regression had a score of $F(1, 68) = 9.877, p = .002$

Table 44

Linear Regression By Gender For Question 3.12

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Regression	7.467	1	7.467	9.877	.002 ^b
Residual	51.405	68	.756		
Total	58.871	69			

a. Dependent Variable: Q3.12

b. Predictors: (Constant), Gender

Analysis of state results.

Question 3.4 (Table 41) sought to determine if teachers believed they could integrate core subjects into their music curriculum. This question had significance in the area of years of experience. The full sample had a score of $M = 3.16$ with a $SD = .866$. Table 45 displays the complete scores for the participants based on years of experience. The years of experience range in a score of $M = 2.61$ to $M = 3.63$.

Table 45

<i>Mean And Standard Deviation By Years Of Experience For Question 3.4</i>			
	<i>N</i>	<i>M</i>	<i>SD</i>
0-5 years	23	2.61	.783
6-10 years	23	3.09	.793
11-15 years	23	3.26	.964
16-20 years	17	2.82	.809
21-25 years	24	3.42	.830
26-30 years	18	3.28	.752
More than 30 years	19	3.63	.761
Total	147	3.16	.866

Table 46 shows a one-way ANOVA based on years of experience that resulted in score of $F(6, 140) = 3.801, p = .002$. A Pearson Product-Moment Correlation was conducted on question 2.4 based on the question and level taught. The correlation resulted in a moderate interaction between question and gender with a score of $r = .301$ and a $p < .001$.

Table 46

<i>One-Way ANOVA By Years Of Experience For Question 3.4</i>					
	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Between Groups	15.326	6	2.554	3.801	.002
Within Groups	94.075	140	.672		
Total	109.401	146			

A linear regression was conducted using the same variables. The linear regression displayed independence of the residuals as based on the Durbin-Watson statistic of

2.193. The R^2 for the overall model was 9.1%, with the adjusted R^2 of 8.5%. As shown in Table 47 the regression had a score of $F(1, 145) = 14.476, p < .001$.

Table 47

Linear Regression By Years Of Experience For Question 3.4

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Regression	9.931	1	9.931	14.476	.000 ^b
Residual	99.470	145	.686		
Total	109.401	146			

a. Dependent Variable: Q3.4

b. Predictors: (Constant), Years of Experience

Question 3.7 (Table 39) was a question about if the participant feels that they are supported by their school when integrating curriculum. Question 3.7 had significance in the areas of level taught and subject taught. The full group had a score of $M = 3.08$ with a $SD = .848$. Table 48 displays the results for the levels taught, which range from $M = 2.50$ to $M = 3.71$.

Table 48

Means And Standard Deviations By Subject For Question 3.7

	<i>N</i>	<i>M</i>	<i>SD</i>
Elementary	52	3.10	.869
Middle School/Junior High	33	2.94	.747
High School	37	3.24	.863
Elementary, Middle School	7	3.71	.488
Elementary, Middle School/Junior High, High School	4	3.50	.577
Middle School/Junior High, High School	14	2.50	.855
Total	147	3.08	.848

Table 49 displays the results for the subject taught, which range from $M = 1.00$ to $M = 4.00$ depending on the subject taught. It should be noted that there was only one participant in the $M = 1.00$ category and with $M = 4.00$ category.

Table 49

<i>Mean and Standard Deviation By Subject Taught For Question 3.7</i>			
	<i>N</i>	<i>M</i>	<i>SD</i>
General Music	33	2.88	.893
Choir	11	3.64	.505
Band/Orchestra	33	2.88	.781
Other	1	4.00	.
General Music, Choir	30	3.50	.630
General Music, Choir, Other	10	3.50	.527
General Music, Band/Orchestra	14	3.14	.663
General Music, Band/Orchestra, Other	1	2.00	.
Band/Orchestra, Other	2	3.00	.000
Choir, Band/Orchestra, Other	1	1.00	.
General Music, Choir, Band/Orchestra	6	2.00	1.265
General Music, Other	2	3.00	.000
Choir, Band/Orchestra	2	2.00	.000
Choir, Other	1	4.00	.
Total	147	3.08	.848

Level taught displayed significance on question 3.7. The full group had a score of $M = 3.08$ with a $SD = .848$. A one-way ANOVA was then conducted on the level taught. Table 50 shows a one-way ANOVA based on level taught resulted in score of

$F(5, 141) = 2.929, p = .015$. A Pearson Product-Moment Correlation was conducted on question 3.7 based on the question and level taught. The correlation resulted in a small interaction between question and gender with a score of $r = .089$ and a $p = .286$. A linear regression was conducted using the same variables. The linear regression displayed independence of the residuals as based on the Durbin-Watson statistic of 2.040. The R^2 for the overall model was .8%, with the adjusted R^2 of .1%. The regression had a score of $F(1, 145) = 1.148, p = .286$.

Table 50

One-Way ANOVA By Level Taught For Question 3.7

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Between Groups	9.883	5	1.977	2.929	.015
Within Groups	95.137	141	.675		
Total	105.020	146			

Table 51 shows a one-way ANOVA based on subject taught resulted in score of $F(13, 133) = 4.040, p < .001$. A Pearson Product-Moment Correlation was conducted on question 3.7 based on the question and subject taught. The correlation resulted in a small interaction between question and subject with a score of $r = .097$ and a $p = .240$. A linear regression was conducted using the same variables. The linear regression displayed independence of the residuals as based on the Durbin-Watson statistic of 2.050. The R^2

for the overall model was .9%, with the adjusted R^2 of .3%. The regression had a score of $F(1, 145) = 1.390, p = .240$.

Table 51

One-Way ANOVA By Subject Taught For Question 3.7

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Between Groups	29.730	13	2.287	4.040	.000
Within Groups	75.290	133	.566		
Total	105.020	146			

Question 3.10 (Table 39) indicated that it contained significance in the areas of gender and the two-way ANOVA based on subject and level taught. Question 3.10 was a positive attitude question about self-directed planning time being a vital component of curriculum integration. The full group had a score of $M = 3.59$ with a $SD = .660$. Males had score of $M = 3.41$ to the female score of $M = 3.71$ based on gender.

First a one-way ANOVA was conducted on the gender. Table 52 shows a one-way ANOVA based on gender resulted in score of $F(1, 145) = 7.859$, $p = .006$. A Pearson Product-Moment Correlation was conducted on question 3.10 based on the question and gender. The correlation indicated a small interaction between question and gender with a score of $r = -.227$ and a $p = .006$.

Table 52

One-Way ANOVA By Gender For Question 3.10

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Between Groups	3.274	1	3.274	7.859	.006
Within Groups	60.413	145	.417		
Total	63.687	146			

A linear regression was conducted using the same variables. The linear regression displayed independence of the residuals as based on the Durbin-Watson statistic of 2.025. The R^2 for the overall model was 5.1%, with the adjusted R^2 of 4.5%. As shown in Table 53, the regression had a score of $F(1, 146) = 7.859, p = .006$.

Table 53

Linear Regression By Gender For Question 3.10

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Regression	3.274	1	3.274	7.859	.006 ^b
Residual	60.413	145	.417		
Total	63.687	146			

a. Dependent Variable: Q3.10

b. Predictors: (Constant), Gender

A two-way ANOVA between level taught and subject taught was conducted for question 3.10. Table 54 displays the interaction of subject and level taught with an effect of $F(15, 113) = 2.428, p = .004$. Following the completion of the two-way ANOVA a Pearson Product-Moment Correlation was conducted with question 3.10, subjects taught, and level taught as the variables. The correlation resulted in a small interaction between

subject and level taught with a score of $r = .182, p = .027$. The question displayed a correlation between subject taught and the question with a score of $r = .163, p = .048$. A linear regression followed the correlation that displayed independence of the residuals as based on the Durbin-Watson statistic of 1.991. The R^2 for the overall model was 3.3%, with the adjusted R^2 of 1.9% which is low effect size according to Cohen. The regression had a score of $F(2,146) = 2.440, p = .091$.

Table 54

Two-Way ANOVA By Level Taught And Subject Taught For Question 3.10

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Corrected Model	24.367 ^a	33	.738	2.122	.002
Intercept	74.036	1	74.036	212.769	.000
Subject	8.382	13	.645	1.853	.043
Level	1.635	5	.327	.940	.458
Subject * Level	12.673	15	.845	2.428	.004
Error	39.320	113	.348		
Total	358.000	147			
Corrected Total	63.687	146			

a. R Squared = .383 (Adjusted R Squared = .202)

b. Computed using alpha = .05

Professional Development Section of the Survey

The professional development component of the survey was designed to measure participants' attitudes regarding training relative to career and pre-service professional

development. There were seven questions in this section of the survey, which can be found in Table 55.

Table 55

<i>Questions From The Professional Development Section of Survey</i>	
Question Number	Question
4.2	I have had appropriate training related to integrating other subjects into my music teaching.
4.3	I have had in-service professional development training related to integrated music teaching.
4.4	I have taken one or more arts courses on integrating subjects for college credit.
4.5	I have gained helpful information from the professional development courses I have taken.
4.6	The information presented was built upon connections among disciplines that led me to create new meanings.
4.7	The professional development challenged me to foster my imagination, analytical skills, and reflection in preparation for teaching integrated units.
4.8	The information I received was adaptable to my teaching environment.
4.9	I have conducted professional development sessions related to interdisciplinary music teaching for my colleagues.

Analysis of school district results.

Question 4.2 was designed to determine if teachers believed that they had received appropriate training that would allow them to integrate core subjects into their music curriculum. The years of experience component of this question was significant. The full sample had a score of $M = 3.06$ with a $SD = .849$, which placed the group between the somewhat agree to strongly agree categories. Table 56 displays the complete scores for the participants based on level. The level range is a score of $M = 2.00$ to $M = 3.53$.

Table 56

Mean And Standard Deviation By Years Of Experience For Question 4.2

	<i>N</i>	<i>M</i>	<i>SD</i>
0-5 years	15	3.53	.516
6-10 years	7	3.43	.535
11-15 years	16	2.56	.964
16-20 years	8	3.13	.641
21-25 years	10	3.10	.994
26-30 years	6	2.00	.000
More than 30 years	8	3.50	.535
Total	70	3.06	.849

Table 57 displays a one-way ANOVA based on years of experience and resulted in score of $F(6,63) = 5.260, p < .001$. A Pearson Product-Moment Correlation was conducted on question 4.2 (Table 56) based on the question and level taught. The correlation resulted in a moderate interaction between question and gender with a score

of $r = -.175$ and a $p = .148$. A linear regression was conducted using the same variables. The linear regression displayed independence of the residuals as based on the Durbin-Watson statistic of 2.315. The R^2 for the overall model was 3.0%, with the adjusted R^2 of 1.6%. The regression had a score of $F(1, 68) = 2.136, p = .148$.

Table 57

One-Way ANOVA By Years Of Experience For Question 4.2

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Between Groups	16.611	6	2.769	5.260	.000
Within Groups	33.160	63	.526		
Total	49.771	69			

Question 4.3 (Table 56) prompted teachers to clarify if they received in-service or professional development training related to integrating core subjects into their music curriculum. This question had significance in the area of years of experience. The full sample had a score of $M = 2.99$ with a $SD = .940$, which placed the group in the somewhat agree to strongly agree category. Table 58 displays the complete scores for the participants based on level. The level range in a score of $M = 2.00$ to $M = 3.50$.

Table 58

Mean And Standard Deviation By Years Of Experience For Question 4.3

	<i>N</i>	<i>M</i>	<i>SD</i>
0-5 years	15	3.33	.900
6-10 years	7	3.00	.816
11-15 years	16	2.56	1.031
16-20 years	8	3.25	.707
21-25 years	10	3.10	1.101
26-30 years	6	2.00	.000
More than 30 years	8	3.50	.535
Total	70	2.99	.940

Question 4.5 (Table 56) prompted teachers to clarify if they had gained useful information in professional development training related to integrating core subjects into their music curriculum. This question had significance in the area of years of experience. The full sample had a score of $M = 2.56$ with a $SD = 1.058$. Table 59 displays the complete scores for the participants based on level. The level range is a score of $M = 1.83$ to $M = 3.75$.

Table 59

<i>Mean And Standard Deviation By Years Of Experience For Question 4.5</i>			
	<i>N</i>	<i>M</i>	<i>SD</i>
0-5 years	15	2.73	.961
6-10 years	7	2.57	1.134
11-15 years	16	1.88	.885
16-20 years	8	2.63	1.188
21-25 years	10	2.80	.919
26-30 years	6	1.83	.408
More than 30 years	8	3.75	.707
Total	70	2.56	1.058

Table 60 displays a one-way ANOVA based on years of experience that resulted in score of $F(6,63) = 4.468, p = .001$. A Pearson Product-Moment Correlation was conducted on question 4.5 based on the question and years of experience. The correlation resulted in a small interaction between question and gender with a score of $r = .173$ and a $p = .152$. A linear regression was conducted using the same variables. The linear regression displayed independence of the residuals as based on the Durbin-Watson statistic of 1.992. The R^2 for the overall model was 3.0%, with the adjusted R^2 of 1.6%. The regression had a score of $F(1, 68) = 2.103, p = .152$.

Table 60

<i>One-Way ANOVA By Years Of Experience For Question 4.5</i>					
	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Between Groups	23.065	6	3.844	4.468	.001
Within Groups	54.206	63	.860		
Total	77.271	69			

The subject taught component of question 4.5 was significant. The full group had a score of $M = 5.56$ with a $SD = 1.058$. Table 61 displays the results for the subjects taught, which range from $M = 1.50$ to $M = 4.00$ depending on the subject taught.

Table 61

Means And Standard Deviations By Subject For Question 4.5

	<i>N</i>	<i>M</i>	<i>SD</i>
General Music	19	2.47	.905
Choir	4	4.00	.000
Band/Orchestra	15	2.87	.990
General Music, Choir	20	2.20	1.105
General Music, Choir, Other	2	1.50	.707
General Music, Band/Orchestra	3	2.00	.000
General Music, Band/Orchestra, Other	1	3.00	.
Band/Orchestra, Other	2	1.50	.707
Choir, Band/Orchestra, Other	1	2.00	.
General Music, Choir, Band/Orchestra	2	4.00	.000
General Music, Other	1	4.00	.
Total	70	2.56	1.058

Table 62 shows a one-way ANOVA based on subject taught that resulted in score of $F(10, 59) = 2.460, p = .007$. A Pearson Product-Moment Correlation was conducted on question 4.5. The correlation resulted in a small interaction between question and gender with a score of $r = -.041$ with a $p = .736$. A linear regression was conducted using the same variables. The linear regression displayed independence of the residuals as based on the Durbin-Watson statistic of 2.007. The R^2 for the overall model was .2%, with the adjusted R^2 of -1.3%. The regression had a score of $F(1, 68) = 1.759, p = .187$.

Table 62

One-Way ANOVA By Subject For Question 4.5

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Between Groups	24.601	10	2.460	2.756	.007
Within Groups	52.670	59	.893		
Total	77.271	69			

Question 4.6 (Table 56) was constructed to determine teachers' perceptions regarding the acquisition of useful knowledge that allowed them to make new connections between disciplines. The years of experience component of this question was significant. The full group had a score of $M = 2.64$ with a $SD = 1.036$. Table 63 displays the complete scores for the participants based on level. The level range is a score of $M = 1.83$ to $M = 3.50$.

Table 63

Mean And Standard Deviation By Years Of Experience For Question 4.6

	<i>N</i>	<i>M</i>	<i>SD</i>
0-5 years	15	3.00	.756
6-10 years	7	3.00	1.155
11-15 years	16	1.88	.885
16-20 years	8	2.75	.886
21-25 years	10	2.80	1.033
26-30 years	6	1.83	.753
More than 30 years	8	3.50	.926
Total	70	2.64	1.036

Table 64 displays a one-way ANOVA based on years of experience that resulted in a score of $F(6,63) = 4.548, p = .001$. A Pearson Product-Moment Correlation was conducted on question 4.6 based on the question and level taught. The correlation resulted in a moderate interaction between question and gender with a score of $r = .026$ and a $p = .833$. A linear regression was conducted using the same variables. The linear regression displayed independence of the residuals as based on the Durbin-Watson statistic of 2.363. The R^2 for the overall model was .1%, with the adjusted R^2 of -1.4%. The regression had a score of $F(1, 68) = .045, p = .833$.

Table 64

One-Way ANOVA By Years Of Experience For Question 4.6

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Between Groups	22.388	6	3.731	4.548	.001
Within Groups	51.683	63	.820		
Total	74.071	69			

The subject taught component of question 4.6 was significant. The full group had a score of $M = 2.64$ with a $SD = 1.036$. Table 65 displays the results for the subjects taught, which range from $M = 1.50$ to $M = 4.00$ depending on the subject taught.

Table 65

Means And Standard Deviations By Subject For Question 4.6

	N	M	SD
General Music	19	2.74	.872
Choir	4	4.00	.000
Band/Orchestra	15	2.80	1.082
General Music, Choir	20	2.30	.979
General Music, Choir, Other	2	1.50	.707
General Music, Band/Orchestra	3	2.00	1.000
General Music, Band/Orchestra, Other	1	3.00	.
Band/Orchestra, Other	2	1.50	.707
Choir, Band/Orchestra, Other	1	2.00	.
General Music, Choir, Band/Orchestra	2	4.00	.000
General Music, Other	1	4.00	.
Total	70	2.64	1.036

Table 66 shows a one-way ANOVA based on subject taught that resulted in a score of $F(10, 59) = 2.622, p = .010$. A Pearson Product-Moment Correlation was conducted on question 4.6. The correlation resulted in a small interaction between question and gender with a score of $r = -.101$ with a $p = .407$. A linear regression was conducted using the same variables. The linear regression displayed independence of the residuals as based on the Durbin-Watson statistic of 2.334. The R^2 for the overall model was 1%, with the adjusted R^2 of -.4%. The regression had a score of $F(1, 68) = 697, p = .407$.

Table 66

One-Way ANOVA By Subject For Question 4.6

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Between Groups	22.787	10	2.279	2.622	.010
Within Groups	51.284	59	.869		
Total	74.071	69			

Question 4.7 (Table 56) was designed to ascertain of teachers believed they had gained useful information that helped them make new connections between disciplines. This question had significance in the area of years of experience. The full sample had a score of $M = 2.69$ with a $SD = 1.029$. Table 67 displays the complete scores for the participants based on level. The level range is a score of $M = 2.00$ to $M = 3.63$.

Table 67

Mean And Standard Deviation By Years Of Experience For Question 4.7

	<i>N</i>	<i>M</i>	<i>SD</i>
0-5 years	15	3.00	.926
6-10 years	7	2.86	1.069
11-15 years	16	2.06	.998
16-20 years	8	2.38	.916
21-25 years	10	3.00	.943
26-30 years	6	2.00	.632
More than 30 years	8	3.63	.744
Total	70	2.69	1.029

Table 68 displays a one-way ANOVA based on years of experience that resulted in score of $F(6,63) = 3.832, p = .003$. A Pearson Product-Moment Correlation was conducted on question 4.7 based on the question and level taught. The correlation resulted in a small interaction between question and gender with a score of $r = .077$ and a $p = .526$. A linear regression was conducted using the same variables. The linear regression displayed independence of the residuals as based on the Durbin-Watson statistic of 2.363. The R^2 for the overall model was .1%, with the adjusted R^2 of -1.4%. The regression had a score of $F(1, 68) = .406, p = .526$.

Table 68

One-Way ANOVA By Years Of Experience For Question 4.7

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Between Groups	19.541	6	3.257	3.832	.003
Within Groups	53.545	63	.850		
Total	73.086	69			

Question 4.9 (Table 56) was designed to determine if teachers had ever conducted professional development training sessions. This question had significance in the area of years of experience. The full sample had a score of $M = 3.39$ with a $SD = 1.081$. Table 69 displays the complete scores for the participants based on level. The level range is a score of $M = 2.17$ to $M = 4.00$.

Table 69

<i>Mean And Standard Deviation By Years Of Experience For Question 4.9</i>			
	<i>N</i>	<i>M</i>	<i>SD</i>
0-5 years	15	3.33	1.234
6-10 years	7	4.00	.000
11-15 years	16	3.13	1.310
16-20 years	8	3.13	.991
21-25 years	10	3.90	.316
26-30 years	6	2.17	1.169
More than 30 years	8	4.00	.000
Total	70	3.39	1.081

Table 70 displays a one-way ANOVA based on years of experience that resulted in score of $F(6,63) = 3.216, p = .008$. A Pearson Product-Moment Correlation was conducted on question 4.9 based on the question and level taught. The correlation resulted in a small interaction between question and gender with a score of $r = .021$ and a $p = .860$. A linear regression was conducted using the same variables. The linear regression displayed independence of the residuals as based on the Durbin-Watson statistic of 2.203. The R^2 for the overall model was 0%, with the adjusted R^2 of -1.4%. The regression had a score of $F(1, 68) = .031, p = .860$.

Table 70

<i>One-Way ANOVA By Years Of Experience For Question 4.9</i>					
	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Between Groups	18.894	6	3.149	3.216	.008
Within Groups	61.692	63	.979		
Total	80.586	69			

Analysis of state results.

The level taught component of question 4.9 (Table 56) was significant. The full group had a score of $M = 3.38$ with a $SD = 1.023$. Table 71 displays the results for the subjects taught, which range from $M = 1.86$ to $M = 3.57$, depending on the level taught.

Table 71

Means And Standard Deviations By Level For Question 4.9

	<i>N</i>	<i>M</i>	<i>SD</i>
Elementary	52	3.48	1.000
Middle School/Junior High	33	3.42	1.032
High School	37	3.41	.865
Elementary, Middle School	7	1.86	1.464
Elementary, Middle School/Junior High, High School	4	3.50	.577
Middle School/Junior High, High School	14	3.57	.852
Total	147	3.38	1.023

Table 72 shows a one-way ANOVA based on level taught that resulted in a score of $F(5,141) = 3.632, p = .004$. A Pearson Product-Moment Correlation was conducted on question 4.9 based on the question and level taught. The correlation resulted in a small interaction between question and gender with a score of $r = -.038$ with a $p = .645$. A linear regression was conducted using the same variables. The linear regression displayed independence of the residuals as based on the Durbin-Watson statistic of 1.948. The R^2 for the overall model was 5.5%, with the adjusted R^2 of 4.8%. The regression had a score of $F(1, 145) = .213, p = .645$.

Table 72

One-Way ANOVA By Level For Question 4.9

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Between Groups	17.421	5	3.484	3.632	.004
Within Groups	135.246	141	.959		
Total	152.667	146			

Open Response Questions Section of Survey

The final section of the survey consisted of the open response questions. This section of the survey had two open response questions that the participants could choose to answer. Participants could choose to answer either of the questions. The first question was from a positive curriculum integration view and the second was from a negative curriculum integration view, as shown in Table 73.

Table 73

Open Response Questions

Question Number	Perspective Towards Integration	Question
5.1	Positive	If you integrate core subjects into your curriculum, please explain your reasons for doing so.
5.2	Negative	If you do not integrate core subjects into your curriculum, please explain your reasons for not doing so.

Numerous participant responses aligned with both the positive and/or negative viewpoint in the first answer box and omitted the second box altogether; in some

instances, both boxes were left blank. The open response question resulted in a return number of $N = 32$ for the school district, which was a 46% answer rate for these two questions. The state resulted in an answer rate of $N = 82$, which was a 56% answer rate for the questions.

Analysis of school district results.

There were $N = 27$ school district returns with positive attitudes toward curriculum integration and $N = 9$ returns with a negative attitude toward curriculum integration. Of the 27 positive attitudes that were coded $N = 9$ stated their reason for a positive attitude toward curriculum integration. $N = 1$ participant among those with negative opinions stipulated a reason for a negative attitude. The negative opinion resulted in $N = 1$ for their reason for a negative attitude toward curriculum integration.

Positive attitude towards curriculum integration.

As previously stated, the positive attitude had a return rate of $N = 27$. An example of positive attitude is “I think it is imperative for the students to make the connections” and “I believe that it is more engaging and interesting to include student's core subjects.” This participant believes that all subjects must be linked together, while another participant indicated a positive attitude with a disclaimer statement, “I integrate subjects when I there is a benefit for the music classroom.”

Participants by level taught that indicated a positive attitude toward curriculum integration were as follows; elementary school $N = 16$, middle school $N = 4$, and high school $N = 8$. The elementary school had an 84% positive attitude regarding curriculum

integration. That the positive attitudes held such a high return rate was due to the teachers feeling the need to help the students to make connections between what they learned in music class and in other subjects. The intention of the connections was to ultimately help the student to have a better understanding on what was being taught in the music classroom. Middle school had a return rate 57% positive attitude towards curriculum integration response rate. As with the elementary level teachers the middle school teachers felt that it was important to help the students to make connections with other subjects, if it helped with the understanding of what was being taught in their classroom. The lower percentage of positivity towards curriculum integration occurred due to many stating that rehearsal needed to take precedence over curriculum integration. This could be due to the fact that many of these teachers instruct the students on how to perform and improve their practice in being a musician in a performance-based class. The high school had a 100% positive attitude towards curriculum integration response rate, that means that based their positive attitude. The high school teachers had a higher percentage with a positive attitude towards curriculum integration. In the examples provided most were using the integration to help the student obtain a deeper understanding of the music that was being performed. Some of the understanding was through historical knowledge or through a deeper connection with the words being sung in the choral classroom. The positive attitude was expressed on two occasions when a respondent stated he/she worked in an integrated magnet school and believed that curriculum integration helps students gain life skills through critical thinking skills when completing projects based on curriculum integration.

When examined by subject taught, the participants had a positive attitude towards curriculum integration, with general music and choir having a favorable view towards curriculum integration. There was a return rate of 82% positive attitude towards curriculum integration response rate. Many of the general music teachers responding with the need to help the students make connections with other subjects. The choir had a return rate of 93% positive attitude regarding curriculum integration. As with the general music teachers the choral teachers stated that helping the students to make connections with other subjects was important. It was also important that the students understood the meaning of the words in the music in order to better express the meaning of the music. This was accomplished through the integration of ELA and Humanities. Band/orchestra had a 60% positive attitude regarding curriculum integration. Many of the respondents stated that they only integrated subjects when it fit within their rehearsal schedule and when it was needed to help the students to understand a piece of music better.

Gender is the next area of analysis when based on a positive attitude towards curriculum integration. Females had a 77% positive attitude regarding curriculum integration, with many being in the elementary level and teaching general music and/or choir. Only one of the female returns were in the high school level of teaching. The males had a 91% with a positive attitude regarding curriculum integration many teaching at the middle school and high school levels and in the subject of band/orchestra, but three did teach elementary general music.

Many participants who submitted positive responses also provided examples of curriculum integration that they use in their classrooms. There were eight examples of

ELA curriculum integration returned. With all the choral teachers stating that text study of the lyrics to provide understanding of the music to help students emotionally relate to the music. Of the answers returned four were from the high school level. The historical context of the song was the most quoted in this area of curriculum integration among any of the levels and subjects taught, particularly among the elementary general music teachers. Math had examples returned with half of the examples coming from elementary general music teachers. Most of the math examples related to fractions and parts of the beat in rhythm which would align with the elementary general music teacher because that when fractions are taught to students in the state of Tennessee. Science had the lowest return rate of any core subject area, again with most being the elementary general music teacher. The examples from this were an integration between elementary science lesson based on pitch and volume, which is used in music as well.

Negative attitude regarding curriculum integration.

The return rate for teachers with negative attitudes was much lower than the return rate for those teachers with a positive attitude towards curriculum integration. An example of negative attitude is “I feel that music should be learned for its own sake” and “I don't just sing songs about other classroom subjects. For me, integrations for the sake of integration benefits no one.” These participants believe that music should be the only subject of focus in their classroom.

Level taught had an impact on the participant's that had a negative attitude towards curriculum integration. The elementary school had a return rate of 36% negative attitude towards curriculum integration response rate. The most cited comment

from the elementary school teachers was the lack of contact time with the students. Another factor was the amount of material that needed to be known, with four subjects for each level taught at the school. Middle school had a return rate of 28% negative attitude towards curriculum integration response rate. Many felt that there was lack of collaboration with the teachers that taught core subjects in the school. This lack of collaboration lead to a feeling that music was a lesser subject in the eyes of the core teachers. The high school did not have any returns for the negative attitude towards curriculum integration response rate.

Subject taught also had an effect on the participant's that had a negative attitude towards curriculum integration. General music had a 14% negative attitude towards curriculum integration response rate. Again, here it was the lack of contact time with the students and the lack of training on the various levels that would need to be integrated. Many of these teachers were at the elementary level. The choir had a 20% negative attitude towards curriculum integration response rate, with most having a problem with the lack of training in how to integrate and a lack of time available to them to plan the integration. Band/orchestra had a no returns in this category.

Gender is the next area of analysis when based on a negative attitude towards curriculum integration. Females had a 33% negative attitude towards curriculum integration response rate. Of those that had a negative attitude many taught in the general music area and also cited a lack of contact time with the students. The Males had a 27% negative attitude towards curriculum integration response rate, again with many males being in the middle school and high school levels and band/orchestra teachers.

Many of the negative examples included comments about professional development and the lack of training needed to perform curriculum integration, as the following quote from a beginning male choral teacher in the middle school setting states:

“I do not currently incorporate subjects into my music curriculum. At this point in my career, I am not very knowledgeable as to how to do so effectively. I feel that if I had a mentor who could help guide me in ways to incorporate integration into my teaching, I would do so.”

Other participants stated that they have received little training on how to integrate core subjects into music.

The most common theme noted was the lack time participants had in class to teach their subject and the lack of planning time they could use to plan curriculum integration or work with a mentor teacher on curriculum integration.

Analysis of state results.

The state resulted in an answer rate of $N = 82$, which is a 56% participation rate. There were $N = 59$ participants with positive attitudes regarding curriculum integration and $N = 30$ participants with negative attitudes regarding curriculum integration, with some participants giving both a positive and negative response. $N = 30$ participants with positive attitudes regarding curriculum integration stated their reasons, while $N = 5$ participants with negative attitudes stated their reasons.

Positive attitude towards curriculum integration.

Having a positive attitude towards curriculum integration was one of the two open-ended questions that were asked. Many of the teachers that chose to answer the open-ended question chose to write from a positive perspective. When answering in the

positive prospective the participants answered with their reasons for their attitude and in many cases provided examples of why they felt the way they did. The following is an example of positive attitude that is from a female teacher that taught all three areas of general music, choir, and band/orchestra, and also taught two levels with the middle school and high school:

“It is important to make as many meaningful connections to students as possible to help them develop a well-rounded education as well as a general respect and understanding of the arts and their studies. Nothing in life is an isolated study, everything has multiple influences and students need to see and understand the connectivity.”

Other participants mentioned being a team player or noted that when students see the connections, they have a deeper understanding of all the material that has been taught.

When broken down by level taught the participant's that had a positive attitude towards curriculum integration. The elementary school had a return rate of 97% positive attitude towards curriculum integration response rate towards curriculum integration. That the positive attitudes held such a high return rate was due to the teachers feeling the need to help the students to make connections between what they learned in music class and in other subjects. The intention of the connections was to ultimately help the student to have a better understanding on what was being taught in the music classroom. Middle school had a return rate 59% positive attitude towards curriculum integration response rate. As with the elementary level teachers the middle school teachers felt that it was important to help the students to make connections with other subjects, if it helped with the understanding of what was being taught in their classroom. The lower percentage of positivity towards curriculum integration occurred due to many stating that rehearsal

needed to take precedence over curriculum integration. This could be due to the fact that many of these teachers instruct the students on how to perform and improve their practice in being a musician in a performance-based class. The high school had a 84% positive attitude towards curriculum integration response rate, that means that based their positive attitude. The high school teachers had a higher percentage with a positive attitude towards curriculum integration. In the examples provided most were using the integration to help the student obtain a deeper understanding of the music that was being performed. Some of the understanding was through historical knowledge or through a deeper connection with the words being sung in the choral classroom.

When broken down by subject taught the participant's that had a positive attitude towards curriculum integration, general music and choir had a favorable view towards curriculum integration. General music had a 91% positive attitude towards curriculum integration response rate. Many of the general music teachers responding with the need to help the students make connections with other subjects. The choir had a return rate of 85% positive attitude towards curriculum integration response rate. As with the general music teachers the choral teachers stated that helping the students to make connections with other subjects was important. It was also important that the students understood the meaning of the words in the music in order to better express the meaning of the music. This was accomplished through the integration of ELA and Humanities. Band/orchestra had a response rate of 54% positive attitude towards curriculum integration. Many of the respondents stated that they only integrated subjects when it fit within their rehearsal schedule and when it was needed to help the students to understand a piece of music better.

Gender is the next area of analysis when based on a positive attitude towards curriculum integration. Females had an 85% positive attitude towards curriculum integration response rate, with many being in the elementary level and teaching general music and/or choir. The Males had a 73% positive attitude towards curriculum integration response rate with many teaching at the middle school and high school levels and in the subject of band/orchestra.

Several positive responses provided by participants also gave examples of curriculum integration that is performed in classrooms. The examples were broken into the different core subjects. There were three examples of ELA curriculum integration returned. Similar to teachers in the research district, the state choral teachers would quote text study of the lyrics to provide understanding of the music to help students emotionally relate to the music. Humanities had a higher return rate among the teachers from the elementary level and general music teachers in which the historical context of the song was often discussed. The historical context of the song was the most quoted in this area of curriculum integration among any of the levels and subjects taught. Math had examples returned with many of the examples coming from elementary general music teachers. Most of the math examples related to fractions and parts of the beat in rhythm which would align with the elementary general music teacher because that when fractions are taught to students in the state of Tennessee. Science had the lowest return rate of any core subject area, again with most being the elementary general music teacher. The examples from this were an integration between elementary science lesson based on pitch and volume, which is used in music as well.

Negative attitude towards curriculum integration.

There was a return rate for teachers with negative attitudes was much lower than the return rate for those teachers with a positive attitude towards curriculum integration. An example of negative attitude is “I feel obligated as it is a state standard” and “if I'm really being honest, I think it's insane that I'm expected to teach music AND English AND math AND science AND social studies.” These two participants indicated that music should be the only subject of focus in their classroom.

Level taught had an impact on the participant's that had a negative attitude towards curriculum integration. The elementary school had a return rate of 37% negative attitude towards curriculum integration response rate. The most cited comment from the elementary school teachers was the lack of contact time with the students. Another factor was the amount of material that needed to be known, with four subjects for each level taught at the school. Middle school had a return rate of 37% negative attitude towards curriculum integration response rate. Many felt that there was lack of collaboration with the teachers that taught core subjects in the school. This lack of collaboration lead to a feeling that music was a lesser subject in the eyes of the core teachers. The high school had a return rate 26% negative attitude towards curriculum integration response rate. These teachers expressed a lack of collaboration, time to study the integration, and training on curriculum integration as being why they had a negative attitude towards curriculum integration.

Subject taught also had an effect on the participant's that had a negative attitude towards curriculum integration. General music had a 28% negative attitude towards

curriculum integration response rate. Again, here it was the lack of contact time with the students and the lack of training on the various levels that would need to be integrated. Many of these teachers were at the elementary level. The choir had a 16% negative attitude towards curriculum integration response rate, with most having a problem with the lack of training in how to integrate and a lack of time available to them to plan the integration. Band/orchestra had a 51% negative attitude towards curriculum integration response rate. Most of the band/orchestra teachers stated that the loss of rehearsal time was hindrance towards being able to complete curriculum integration, with many feeling that music should be taught for music's sake.

Gender is the next area of analysis when based on a negative attitude towards curriculum integration. Females had a 43% negative attitude towards curriculum integration response rate. Of those that had a negative attitude many taught in the general music area and also cited a lack of contact time with the students. The Males had a 39% negative attitude towards curriculum integration response rate, again with many males being in the middle school and high school levels and band/orchestra teachers.

Numerous negative examples included comments about fairness of curriculum integration and the lack of training needed to perform curriculum integration. A beginning male band teacher in the high school setting stated, "No effort is made to connect my Band classes to whatever is being taught in other classrooms." This participant indicated a reluctance to integrate curriculum because music is not implemented into other subjects. Other participants noted the lack of time such as "I wouldn't get any rehearsing done if I was trying to force a connection between a core

subject and the piece of music the students are learning.” Each of these examples demonstrate that participants are primarily concerned with music as opposed to integrating other subjects.

Summary and Conclusion

The first research question was formulated to determine if there was an effect, based on level taught, on the attitudes of music specialists toward curriculum integration. Participants from both the research district and state level provided numerous examples that indicated the level taught impacted the attitudes of music specialists regarding curriculum integration. There were three significant answers provided by participants from the research district and eight significant answers provided by participants from the state. The second research question was based on if the attitudes of music specialists regarding curriculum integration were impacted based on the subject taught. Significant results were indicated based on answers provided by both participants from the research district and the state. There were five significant answers provided by participants from the research district and five significant answers provided by state participants.

In the school district two questions held significance based on the two-way ANOVA with the interaction between subject taught and level taught. Results from state participants indicated that three questions held significance based on the two-way ANOVA with the interaction between subject taught and level taught. An interaction between the subject taught and level taught caused the significance for each of these questions.

Additional demographic areas were determined to be significant. Gender impacted results at both the district and state levels. It was determined that males were less receptive to curriculum integration than females.

Significance was noted pertaining to professional development. Years of experience was a factor, as indicated by five of a possible nine questions from research district participants holding a different result. Question 4.2 held significance pertaining to state participants. The mean scores display the difference in the attitudes based on years of experience.

Qualitative data indicated a positive attitude towards curriculum integration based on the full group, subject taught, level taught, gender, and years of experience. This corroborated the results found in the quantitative data.

Thus, the results from both the school district and the state demonstrate that there is reason to believe that the attitudes of music specialists are affected by the level and subject taught. Additionally, other factors, such as gender and years of experience, had an effect. The open response questions helped to align the answers to the quantitative portion of the survey. A complete reporting of the findings can be found in Chapter 5.

CHAPTER 5

DISCUSSION

This was a mixed-methods study in which music specialists' attitudes toward curriculum integration were measured. The participants were drawn from two pools: first, a local school district and second, a statewide TMEA membership. The local school district provides a convenience sample while the membership of those in the Music Educators Association are more purposeful providing a larger pool of practicing music teachers in a state in the American. All of the participants were music specialists in the 2017- 2018 school year, who either taught in the school district in Tennessee or were members of TNMEA. They completed a survey that contained 39 questions. The survey was divided into five sections, with Four-Point Likert Scale-type questions being posed in the first three sections, and section four containing two open response questions. Section five contained questions related to demographic information. The first section was about defining curriculum integration and had questions that contained examples of Bresler's (1997) co-equal and subservient music integration styles, to which the participants were asked to rate their responses. The second section comprised the attitudes section, in which the participants were asked to answer questions about their attitudes towards curriculum integration, including rating themselves on their ability to integrate core subjects into their music curricula, such as ELA, Math, Science, and Social Studies, and art subjects such as visual arts and dance. The curriculum attitude section also contained questions about how supported by their school the music specialists felt in conducting curriculum integrated lessons. Section three was the professional

development section of the survey, in which the participants were asked to think about and rate any professional development or college classes that they had attended on the subject of curriculum integration. The participants were further asked to rate how useful the information was that they received at a professional development session when creating and teaching lessons that contained curriculum integration. In the fourth section, with the two open response questions that the participants could choose from to further detail how they felt about curriculum integration, the participants could choose between a positive and negative response to curriculum integration. Most of them chose to answer in the first box, regardless of whether their answers were positive or negative.

$N = 70$ surveys were returned from the school district out of 89, for a total of 78% of the total population. Of this population, $N = 27$ were from elementary schools, $N = 20$ were from middle school/junior high, and $N = 23$ taught at high schools, as shown in figure 1 in Chapter 4. $N = 147$ out of 1,302 surveys were returned by state school teachers, representing only 11.3% of the total population. The return rate was low, but by using the school district from Tennessee, which had a higher return rate, the possibility of predicting trends was created with this sample population.

Once the surveys had been conducted the data was imported into SPSS (version 25) to analyze the quantitative data from the first three sections of the survey. ATLAS:ti (version 8) was used to analyze the qualitative data elicited by the open response questions. The quantitative data was then analyzed using descriptive data from the full group in relation to their demographics, in order to ascertain a mean score and range per subgroup for each question. The sub-groups were created on the basis of level taught,

subject taught, gender, years of experience, and degree earned. Data on the race of the participants, the primary and secondary races of the schools at which the participants taught, was collected. Furthermore, this data was not used because it was skewed towards one race, with 85% being White/Caucasian. Following the full group analysis, the sub-groups were analyzed using a One-Way ANOVA. If the information was found to be significant, then a Pearson Time Moment Correlation and a Linear Regression were completed on the results to determine how much of an impact that question had on the survey sub-group. After the completion of the One-Way ANOVA's the same process was completed using a Two-Way ANOVA based on subject and level taught. Again, if the information was found to be significant, a Pearson Time Moment Correlation and a Linear Regression were completed on the responses to determine how much of an impact that sub-group had on the results of the survey.

The purpose all of the questions in the survey and the analyses of the responses were to answer the following research questions:

1. Is there an effect of grade level, elementary, middle school, or high school that the music specialists teach on their attitudes toward the teaching of the core curriculum in the music classroom?
2. Is there an effect of a music specialist chose specialty area, general music, band/orchestra, or choir, on their attitude toward the teaching of core curriculum within their grade level?

The research findings are detailed below and will be discussed in relation to the research questions in the same order that the questions appeared in the questionnaire,

along with other discoveries that emerged from the survey data. This discussion will be followed by the conclusion.

Research Question 1

Upon the completion of analyzing each question in relation to the demographic data, there were two sets of response to questions that were significant from the school district and thirteen significant sets of responses from the state population. These were based on level taught by itself or in combination with subject taught in the two-way ANOVA. The data is not proven to be critical unless it can pass the hypothesis based on Fisher–Snedecor Distribution Tables or F score. The hypothesis for research question one was:

H_0 = Level taught has no effect on the attitudes of music specialists based on level taught.

$H_1 = \bar{X}_{\text{Elementary}} \neq \bar{X}_{\text{Middle School}} \neq \bar{X}_{\text{High School}}$

School district findings for the defining curriculum attitudes section of the survey.

Question 2.5 (Table 15) comprised a co-equal example based on Bresler's styles of curriculum integration that placed music and art on equal terms, which resulted in a difference when a two-way ANOVA was conducted with the subjects and level taught. The interaction between the subjects taught and level taught of the participants in question 2.5 yielded a result of $F(9, 48) = 3.053$, $p = .006$. The F distribution table states that $F < 2.08$ to reject H_0 . With an F score of 3.053 which provides the evidence to reject H_0 .

There were variances in the mean scores based on the level taught and subject taught. The range for a general music specialist in middle school was a low score of

$M = 1.00$ to a high score of $M = 3.00$ for a general music specialist who also taught band in the middle school. With, 75.7% of the population strongly agreed with the co-equal example, with a further 27.1% agreeing. The strongly agree and somewhat agree responses accounted for 97.1% of the total score for Bresler's co-equal example, in which the arts and music are used for curriculum integration. Ideally, if a music specialist knew about Bresler's levels of integration, they would have chosen strongly agree for this question.

State findings for the defining curriculum attitudes section of the survey.

Question 2.3's (Table 16) example was subservient based on Bresler's styles of curriculum integration, with music being placed in a lower role to that of learning facts about Earth Day in science. The state had $N = 147$ with an $M = 3.01$ and an $SD = .891$. When isolating the levels taught the mean range was from $M = 2.93$ to $M = 4.00$. The results from the one-way ANOVA were $F(5, 141) = 4.426, p = .001$. The F distribution table states that $F < 2.27$ to reject H_0 . With an F score of 4.426, which provides the evidence to reject H_0 . The mean scores for those who taught only one level were $M = 2.75$ for elementary school, $M = 2.88$ for middle school, and $M = 3.27$ for high school. Additionally, those who taught two levels at elementary school and middle school had a score of $M = 4.00$, and the middle school and high school teachers had a score of $M = 2.93$. Those that taught at all three levels had a score of $M = 3.75$.

Consequently, the high school level educators mostly agreed or strongly agreed that this was a good example of curricular integrated teaching. The elementary teachers had the largest group that strongly disagreed that this was a good example of curricular integrated teaching, while those that taught at multiple levels either agreed or strongly agreed that this was a good example of curricular integrated teaching. Bresler would place this example in the subservient category of Bresler's styles, in which music is placed in the secondary role. In this case, the only musical activity was singing, with no real learning about music taking place. Ideally, if a music specialist knew about Bresler's levels of integration, then they would have chosen strongly disagree for this question. Only 7% of the respondents chose that option, with the elementary school teachers having the highest percentage of respondents choosing that answer at 11%.

Question 2.4 (Table 15) was a co-equal example based on Bresler's styles in which music and ELA were used together. Again, those who taught at only one level had a higher mean score than those who taught at two or more levels. With 78.6% of the respondents strongly agreeing with the co-equal example, and a further 21.4% agreeing with this co-equal example, a total of 100% agreed with this example. A one-way ANOVA resulted in score of $F(5, 141) = 4.426, p = .001$. The F distribution table states that $F < 2.27$ to reject H_0 . With an F score of 4.426, which provides the evidence to reject H_0 .

Question 2.5 (Table 15) was another co-equal example based on Bresler's styles based on music and visual art. The responses to this question were significant in the two-way ANOVA with a score of $F(15, 113) = 1.016, p < .001$. The F distribution table states

that $F < 1.77$ to reject H_0 . With an F score of 1.016, which provides the evidence to reject H_1 . This was due to 70% of the population choosing strongly agree, 4% choosing somewhat disagree, and two from high school choosing strongly disagree. In an ideal world, if a music specialist knew about Bresler's styles of integration, then he or she would have chosen strongly agree this question. As it is, 94.5% chose to agree or strongly agree with this example.

Question 2.7 (Table 15) was a co-equal example based on Bresler's styles of curriculum integration that combined music and social studies. The responses were significant in terms of both the level taught by one-way ANOVA and the two-way ANOVA by subject and level taught. The level taught had a score of $F(5, 141) = 3.149$, $p = .010$. The F distribution table states that $F < 2.27$ to reject H_0 . With an F score of 3.149, which provides the evidence to reject H_0 . A total of 68.0% strongly agreed with the co-equal example, and a further 25.9% agreed with this co-equal example based on Bresler's styles with a total of 93.9%. Again, the difference was due to 55% of those who taught multiple levels at schools choosing somewhat disagree or strongly disagree, with two participants from high schools that were the only ones in the entire sample who chose strongly disagree. The two-way ANOVA interaction of subject and level taught had an effect of $F(15, 113) = 2.367$, $p = .005$. The F distribution table states that $F < 1.77$ to reject H_0 . With an F score of 2.367, which provides the evidence to reject H_0 .

Discussion of defining attitudes section of the survey.

All of the examples except question 2.3 (Table 16) in this section were co-equal examples based on Bresler's styles of curriculum integration, with 2.3 being a subservient

question. According to Bresler, co-equal curricular integration is the type of integration that should be used. In each of the co-equal examples from both the school district and the state, at least 93.9% of the teachers overwhelmingly chose somewhat agree or strongly agree. Those who chose to disagree taught at the high school level or multiple levels. With the subservient examples, more of the respondents chose either somewhat agree or somewhat disagree. In all the examples, H_0 was rejected except for question 2.7 (Table 15) in the school district. The reason for accepting H_0 was because the few that did score differently based on subject taught and level taught were the only one respondent in the category.

With the significance being mainly in the area of the co-equal examples, the data was corroborated by the qualitative answers from the open response questions, with elementary school teachers giving 16 positive responses compared to seven negatives in the school district and 29 positive and 11 negative responses for the state. The high school teachers gave eight positive responses and zero negative responses, with 16 positive responses and five negative responses from the state. The middle school had four positive responses and two negative responses, with 16 positive responses and 10 negative responses for the state.

Additionally, in both groups, the responses to the examples that displayed significance were all co-equal. In the open response question, all of the examples that were given by the participants about curriculum integration were co-equal. One such example was from a high school choral teacher, who stated, “Language in the choral classroom – text study to inform musical understanding and performance.” The previous

quotation is a co-equal example, in which music and ELA text decoding are used equally to provide a better understanding of the music using both subjects.

When comparing the mean scores with those of Jenkins, the scores are similar to the scores collected at Chicago Public Schools in 2012. Jenkins investigated whether there was a difference in the attitudes of elementary music teachers who taught in an arts magnet school versus those who taught in a regular elementary school. On question 2.3 (Table 16) about Earth Day, a subservient example, Jenkins had a mean score range of $M = 2.89$ to $M = 3.12$ for the magnet school and the non-magnet school respectively. In comparison, the school district in this study had a range of $M = 2.74$ to $M = 3.30$ with a full group score of $M = 3.01$ and the state had a range of $M = 2.75$ to $M = 4.00$ with a full group score of $M = 3.01$. The full group means fall with the range seen in Jenkins 2012 study; though, the high school teachers and those who taught at multiple levels rated this subservient question much higher than the teachers who taught at the elementary school level.

On question 2.4 (Table 15), a co-equal example based on Bresler's styles using blues music and its role in society, Jenkins had a range of $M = 3.83$ to $M = 3.96$. In the current study, the results were $M = 3.65$ to $M = 3.89$ in the school district group based on the level taught, with a full group score of $M = 3.79$. The state group had a range of $M = 3.59$ to $M = 4.00$, with a full group mean of $M = 3.80$. There are similar implications to Jenkins study, because the full group mean scores and range scores are consistent with the previous study.

Question 2.5 (Table 15) was a co-equal example based on Bresler's styles based on music and visual arts integration. Jenkins' results had a range of $M = 3.50$ to $M = 3.76$. In this study, the results were $M = 3.45$ to $M = 3.78$ for the school district based on level taught, with a full group mean score of $M = 3.67$, whereas, the state had a range of $M = 3.29$ to $M = 3.75$, with a full group mean score of $M = 3.63$. Again, there are similar implications to the Jenkins study in terms of the full group mean scores and range scores.

Question 2.7 (Table 15) was a co-equal example based on Bresler's styles based on music and social studies integration. Jenkins' study had a range of $M = 3.43$ to $M = 3.48$. In this study, it was $M = 3.70$ to $M = 3.78$ for the school district based on level taught, with a full group mean of $M = 3.73$, whereas the state had a range of $M = 2.75$ to $M = 4.00$, with a full group mean of $M = 3.61$. Again, there are similar implications to the Jenkins study in terms of the full group mean scores and range scores. The range difference on this was due to those teachers that taught at multiple levels having scored at the low and high end of the range.

School district results for curriculum integration section of survey.

There were no results for the school district that were significant for this section of the survey, as determined by the one-way or two-way ANOVAs. Despite this, there were still differences in the means scores by level. In most cases, the high school teachers had higher scores in this section.

On question 3.2 (Table 39), which was about whether the participants felt it was important for the students to experience an integrated arts curricula, the middle school

teachers gave the lowest ratings, with a score of $M = 3.30$, while the elementary school teachers mean score was $M = 3.37$. The high school teachers had a higher rating of $M = 3.70$. A similar picture could be seen when ranking question 3.3 (Table 41), about how confident the teacher felt in his or her ability to integrate art subjects. The middle school teachers scored themselves the lowest, with a score of $M = 3.15$, while the elementary school teachers rated themselves at $M = 3.26$. The high school teachers scored the highest at $M = 3.57$. On the next question 3.4 (Table 41), which was about the participant's ability to integrate core subjects into the music curriculum, a similar effect with the order could be seen. The elementary school teachers scored themselves the lowest, with a score of $M = 2.96$, while the middle school educators rated themselves at $M = 3.20$. The high school teachers scored higher at $M = 3.39$. On question 3.6 (Table 36), about the importance of giving equal time to each subject that had to be explored in the integrated lesson, the middle school teachers rated this example the lowest, with a score of $M = 2.45$, while the elementary school teachers score was $M = 2.67$. The high school teachers scored the highest at $M = 3.04$.

As seen in the above scores, the high school teachers consistently gave the highest ratings in this section of the survey. Out of the 11 questions in the attitude section of the survey, the high school teachers gave themselves the highest scores. On question 3.7 (Table 39), when asked about how supportive their school was on curriculum integration, the high school teachers ranked the lowest with a score of $M = 3.04$, while the elementary school educators' score was $M = 3.19$. The middle school teachers scored lower at

$M = 3.20$. This indicates that curriculum integration is perceived more positively at the elementary school and middle school levels. The high school teachers ranked the lowest at 3.9 when asked about the importance of teacher collaboration. The high school participants had the lowest scores at $M = 3.39$, while the elementary school teachers returned a score of

$M = 3.56$. The middle school participants scored lower at $M = 3.70$. This indicates that high school teachers rely on their own knowledge more than those in the elementary school and middle school. On questions 3.11 and 3.12 (Table 40), the high school participants ranked in the middle. Question 3.11 was about whether the teachers felt constrained by curriculum integrated teaching. The middle school teachers scored the lowest at $M = 1.95$, while the high school participants scored $M = 2.09$. The elementary school teachers scored the highest at $M = 2.33$. The difference in these responses is that the lower score is the better answer for this question, with the participant feeling less constrained by integrated teaching. Question 3.12 was whether the teachers felt they did not have enough time to incorporate integrated teaching into their lessons. Again, as in question 3.11, the lower mean score meant that the teacher felt that they had enough time. The middle school educators scored the lowest with a score of $M = 2.60$, while high school teachers score was $M = 2.74$. The elementary school participants scored higher at $M = 2.89$.

In each of these categories, a difference can be seen between the levels taught and the participants' scores for each question. Most noticeably, the high school participants never gave themselves high enough scores to be ranked the highest on any question in the

section. With the elementary school teachers never scored the lowest on any question, being consistently ranked in the top two scores on each question.

State results for curriculum integration section of survey.

On the attitudes section of the survey, the state did not have any responses that scored significance on the One-Way ANOVA. However, there was still valuable information in the section. Question 3.3 about being confident in their ability to integrate other arts subjects into the music curriculum. The middle school scored themselves the lowest with a score of $M = 2.91$, while the elementary school group scored themselves at $M = 3.23$. The high school educators scored higher at $M = 3.41$. Of those that taught at multiple schools, the middle school/high school respondents had a score of $M = 3.36$, while those that taught at elementary school and middle school had a score of $M = 4.00$. The teachers that taught at all three levels had a score of $M = 3.25$.

On question 3.7 (Table 39) about how supportive their school was in efforts to integrate other subjects into the music classroom, the middle school participants had lowest score of $M = 2.94$, while the elementary school teachers scored $M = 3.10$. The high school group scored higher at $M = 3.24$. Those that taught at multiple schools, beginning with middle school and high school levels, had a score of $M = 2.50$, while those that taught at elementary school and middle school had a score of $M = 3.71$.

Discussion for curriculum integration section of survey.

This section of the survey did not produce a significant result for the school district or the state at the $p \geq .01$ level. That does not mean the results are devoid of

information. In the school district, the high school respondents scored consistently higher among the three primary groups. This occurred in question 3.2 through question 3.7 in which the teachers were asked about the need for curriculum integration and their ability to integrate core curriculum subjects into music. The same pattern was seen in the data for the state with the three primary levels. The difference occurred when the teachers taught at multiple levels. With these teachers the highest mean scores would involve the elementary level taught in combination with another level. Moreover, the state data suggests that those that teach at multiple levels have a higher attitude score in relation to curriculum integration with respect to the questions in this section of the survey when compared to those teachers that taught at one level only.

When comparing the mean scores with those of Jenkins, the scores are lower than the scores collected at Chicago Public Schools in 2012. On question 3.2 Jenkins had a mean score range of $M = 3.81$ to $M = 3.84$ for the magnet school and the non-magnet school respectively, while the school district in this study had a range of $M = 3.30$ to $M = 3.70$, with a full group score of $M = 3.46$, while the state had a range of $M = 3.45$ to $M = 3.71$, with a full group score of $M = 3.46$. While both the school district and the state mean scores are lower than Jenkins scores, they are consistent. This indicates that the teachers in the school district and the state do not feel that curriculum integrated teaching is as important as the teachers in Jenkins study did.

On question 3.3, about integrating other arts subjects into the music curriculum, Jenkins had a range of $M = 3.57$ to $M = 3.43$. In the current study, the range was $M = 3.15$ to $M = 3.57$ in the school district based on level taught, with a full group score of

$M = 3.33$, whereas, the state had a range of $M = 2.91$ to $M = 4.00$, with a full group mean of $M = 3.25$. The ranges of both the school district and the state scores were as high or higher than those of Jenkins; despite the fact that the full group scores were lower than Jenkins'. This indicates that many teachers in the current study do not feel as confident as the arts magnet teachers or as the regular school teachers in Jenkins' study to integrate other arts subjects into their music curriculum.

Question 3.4 was a co-equal example based on Bresler's styles of music and visual arts integration. Jenkins' study had a range of $M = 3.64$ to $M = 3.35$. In this study, the range was $M = 1.61$ to $M = 2.04$ in the school district based on level taught, with a full group mean of $M = 1.83$, while the state had a range of $M = 1.00$ to $M = 1.98$, with a full group mean of $M = 1.84$. Again, the scores were lower than the original study but were consistent with each other. As previously stated, those teachers that taught at multiple levels had lower scores than those that taught at one level.

This same pattern holds true for the remainder of questions, except for 3.11 about feeling constrained by curricular integrated teaching and 3.12 about having enough time to incorporate curricular integrated teaching into the music classroom. On question 3.11 Jenkins' study had a range of $M = 2.00$ to $M = 1.72$. In this study, the range was $M = 1.95$ to $M = 2.33$ for the school district based on level taught, with a full group mean of $M = 2.14$, whereas, the state had a range of $M = 2.00$ to $M = 2.36$, with a full group mean of $M = 2.22$. In this case, the scores are higher. To have a better attitude rating on this question, the score would need to be lower. The school district and the state felt more constrained by curricular integrated teaching. Moreover, in relation to question 2.12, they

felt that they did not have enough time to plan and incorporate other material. These answers were corroborated with the open response questions, with comments such as “I integrate when I can, but it’s hard to find the time to plan it.”

Planning for a curriculum integrated lesson is an essential component and may be part of the reason for which high school teachers scored themselves higher on questions such as 3.8 about feeling free to integrate and 3.4 about their ability to integrate core subjects into music. High schools have many different subjects, so they have to limit the depth at which they integrate other subjects. The reason for this is that often the high school teacher in the music field will have multiple grade levels with a wide range of abilities in the room at one time. The depth of the instruction from a calculus class could not be incorporated into a room in which only a few students may have that training. In this case, the curriculum integration would be too difficult for the other students to comprehend. On the other hand, in elementary school and many middle schools, the teachers see one grade level at a time, thus, making it possible for the teacher to integrate core curriculum material into the music classroom on the students’ level. This can create a scenario in which the teacher cannot integrate core subjects into the music curriculum. One reason for not integrating is being familiar with the material at multiple grade levels. An elementary teacher commented on this exact scenario in the open response questions, saying, “The hardest part is trying to find ways to do this with teaching seven different grades on a seven-day rotation.” In order to integrate core subjects into the music classroom, the teacher must know the standards for seven different grade levels, plus four different core subjects, as compared to the high school teacher’s four. The number of

grade levels in a school can vary by district, but the elementary schools, in general, have more grade levels to teach than a middle school or high school teacher does.

School district results for professional development section of survey.

The school district group did not yield any significant results in this section of the survey, as determined by the one-way and two-way ANOVAs. Despite this, there were still differences in the mean scores by level. In most cases, the high school teachers gave lower scores for the questions in this section.

On question 4.2 (Table 56), about whether the participants felt that they had enough training to integrate other subjects into their music curricula, the elementary school group scored the lowest at $M = 1.81$, the high school teachers scored $M = 1.91$, and the middle school participants scored highest at $M = 2.15$. A similar picture could be seen when ranking question 4.3 (Table 56), regarding whether they had any in-service or professional development training related to integrated music teaching. The elementary school educators scored the lowest at $M = 1.85$, the high school group $M = 2.00$, and the middle school respondents came in highest at $M = 2.25$. On the next question 4.4 (Table 56), about whether they had had any courses in college that taught about arts integrated subjects, the high school and middle school groups returned the lowest score of $M = 1.35$, while the elementary school teachers scored $M = 1.48$. On question 4.5 (Table 56) about how useful the information was that they received during professional development activities, the high school subset had the lowest score of $M = 2.22$, while elementary school group scored $M = 2.52$. The middle school educators scored higher at $M = 2.60$. On question 4.6 (Table 56), about whether the information received in training built upon

prior knowledge, the high school group scored the lowest with a $M = 2.26$, while the elementary school participants had a $M = 2.33$ and the middle school group's score was higher at $M = 2.50$. On question 4.7 (Table 56) about whether the professional development helped to foster any skills to improve their preparation for teaching integrated units, the high school participants scored $M = 2.13$, the elementary school teachers a $M = 2.26$, and the middle school teachers $M = 2.60$. On question 4.8 (Table 56) about the how adaptable the information learnt was to their teaching environment, the high school teachers scored $M = 2.35$, the elementary school group $M = 2.59$, and the middle school educators $M = 2.80$. The final question, 4.9, about whether the participants had attended professional development sessions in interdisciplinary teaching related to music, the elementary school educators scored themselves the lowest at $M = 1.52$, the high school group scored $M = 1.61$, and the middle school teachers scored lower at $M = 1.75$.

State results for professional development section of survey.

In the professional development section, the state teachers yielded one response that proved to be significant, as indicated by the one-way ANOVA on level taught. Question 4.9 (Table 56) about whether they had undergone professional development for interdisciplinary teaching, the elementary school teachers scored themselves the lowest at $M = 1.52$, while the middle school group scored $M = 1.58$ and the high school subset $M = 1.59$. Those that taught at multiple schools, the middle school plus high school teachers had a score of $M = 1.43$, while those that taught at elementary school and middle school levels had a score of $M = 3.14$. The teachers that taught at all three levels had a

score of $M = 1.50$. A one-way ANOVA resulted in a score of $F(5, 141) = 3.632, p = .004$. The F distribution table states that $F < 2.27$ to reject H_0 . With an F score of 3.632, which provides the evidence to reject H_0 .

On question 4.2 (Table 56), about whether the participants felt that they had enough training to integrate other subjects into their music curricula, the middle school group scored the lowest at $M = 1.94$, while the elementary school teachers scored $M = 1.96$, and the high school respondents scored $M = 2.00$. Of those that taught at multiple schools, the middle school plus high school teachers had a score of $M = 1.64$, while those that taught at elementary school and middle school levels had a score of $M = 3.00$. The teachers who taught at all three levels had a score of $M = 2.00$. On question 4.3, about whether they had any in-service or professional development training related to integrated music teaching, the middle school educators scored $M = 1.82$, while the high school participants scored $M = 1.89$, and the elementary school educators scored lower at $M = 1.94$. Of those that taught at multiple schools the middle school plus high school teachers had a score of $M = 1.29$, while those that taught at elementary school and middle school had a score of $M = 2.57$. The teachers that taught at all three levels had a score of $M = 2.00$. On question 4.4 (Table 56), about whether they had taken a college course about curriculum integration, the middle school group scored $M = 1.48$, the elementary school teachers $M = 1.52$, and the high school teachers had the lowest score of $M = 1.62$. Of those that taught at multiple schools, the middle school plus high school teachers had a score of $M = 1.21$, while those that taught at elementary school/middle school had a score of $M = 1.86$. The teachers who taught at all three levels returned a score of

$M = 1.75$. On question 4.6 (Table 56), about whether the information received in training built upon prior knowledge, the high school group scored $M = 2.00$, the middle school teachers $M = 2.09$, and the elementary school participants scored lower at $M = 2.37$. Of those that taught at multiple schools, the middle school/high school teachers had a score of $M = 1.50$, those that taught at elementary school plus middle school had a score of $M = 2.29$, and the teachers that taught at all three levels had a score of $M = 2.75$. On question 4.7 (Table 56) about whether the professional development helped to foster any skills that improved their preparation for teaching integrated units, the high school educators scored themselves $M = 2.11$, the middle school group scored $M = 2.21$, and the elementary school scored $M = 2.27$. Of those that taught at multiple schools, the middle school plus high school teachers had a score of $M = 1.36$, while those who taught at elementary and middle school had a score of $M = 2.29$. The teachers who taught at all three levels had a score of $M = 2.75$. On question 4.8 (Table 56), about the how adaptable the information received was to their teaching environment, the high school group scored $M = 2.14$, the middle school teachers $M = 2.15$ and the elementary school participants $M = 2.46$. Of those that taught at multiple schools, the middle school plus high school educators had a score of $M = 1.79$, while those that taught at elementary school and middle school had a score of $M = 2.29$. The teachers that taught at all three levels had a score of $M = 2.50$.

Discussion for professional development section of survey.

Both the school district and the state groups recorded low satisfaction scores on the Likert Scale, with the school district group returning significant results on the one-

way and two-way ANOVAs. In the school district, the middle school group consistently ranked higher than both the elementary school and the high school respondents. In the state results, the middle school subset was regularly the top scorer. Most notably, the teachers that taught at all three levels had the highest scores on all the questions in the section. This could be due to the size of this group, which was only $N = 4$. Those that taught at the middle school plus high school levels had lower mean scores than any of the other levels for every question in the professional development section of the survey. The teachers who taught at elementary school plus middle school level in the state group consistently rated themselves higher than any of the other levels on many questions in the professional development section of the survey. Again, this could be due to the low number of participants in this group, namely $N = 7$.

In this section of the survey, the results were lower than the scores that Jenkins collected in 2012. On question 4.2, Jenkins had a mean score range of $M = 3.14$ to $M = 2.67$ for the magnet school and the non-magnet school respectively, while the school district in this study had a range of $M = 1.81$ to $M = 2.15$, with a full group score of $M = 1.94$, and the state had a range of $M = 1.84$ to $M = 3.00$, with a full group score of $M = 1.99$. Both the state and the school districts' full group scores were lower than Jenkins' scores on question 4.2. On question 4.3 Jenkins had a mean score range of $M = 3.54$ to $M = 2.08$ for the magnet school and the non-magnet school respectively, while the school district in this study had a range of $M = 1.85$ to $M = 2.25$, with a full group score of $M = 2.01$, and the state had a range of $M = 1.29$ to $M = 2.57$, with a full

group score of $M = 1.87$. Both the state's and the school districts' full group scores were lower than Jenkins' scores on question 4.3. On question 4.4, Jenkins had a mean score range of $M = 1.43$ to $M = 1.25$ for the magnet school and the non-magnet school respectively, while the school district in this study had a range of $M = 1.35$ to $M = 1.48$, with a full group score of $M = 1.40$, and the state group had a range of $M = 1.21$ to $M = 1.86$, with a full group score of $M = 1.53$. Both the state's and the school district's full group scores were slightly higher than those of Jenkins. The results for question 4.4 as compared to Jenkins will be discussed further when examining the additional findings based on years of experience. On question 4.5, Jenkins had a mean score range of $M = 3.52$ to $M = 2.58$ for the magnet school and the non-magnet school respectively, while the school district in this study had a range of $M = 2.22$ to $M = 2.60$, with a full group score of $M = 2.44$. The state had a range of $M = 1.50$ to $M = 2.50$, with a full group score of $M = 2.23$. The state's full group scores were lower than Jenkins' scores on question 4.5. Thus neither the school district's nor the state's highest mean scores were comparable to the lower regular school score in Jenkins' study. On question 4.6, Jenkins had a mean score range of $M = 3.46$ to $M = 2.56$ for the magnet school and the non-magnet school respectively, while the school district in this study had a range of $M = 2.26$ to $M = 2.50$, with a full group score of $M = 2.36$, and the state had a range of $M = 1.50$ to $M = 2.37$, with a full group score of $M = 2.14$. Both the state's and the school district's full group scores were lower than Jenkins' scores on question 4.6. On question 4.7, Jenkins had a mean score range of $M = 3.20$ to $M = 2.43$ for the magnet school and the non-magnet school respectively, while the school district in this study had a range of

$M = 2.13$ to $M = 2.60$, with a full group score of $M = 2.31$, while the state had a range of $M = 1.36$ to $M = 2.75$, with a full group score of $M = 2.14$. Both the state's and the school district's full group scores were lower than Jenkins' scores for question 4.7. For question 4.8, Jenkins had a mean score range of $M = 3.19$ to $M = 2.51$ for the magnet school and the non-magnet school respectively, while the school district in this study had a range of $M = 2.20$ to $M = 2.65$, with a full group score of $M = 2.43$, and the state had a range of $M = 2.50$ to $M = 3.21$, with a full group score of $M = 2.76$. The state's full group scores fell within the range of Jenkins' scores on question 4.7, while the school district's scores were slightly below the range found in Jenkins' study. On question 4.8, Jenkins had a mean score range of $M = 3.17$ to $M = 2.51$ for the magnet school and the non-magnet school respectively, while the school district in this study had a range of $M = 2.35$ to $M = 2.80$, with a full group score of $M = 2.51$, and the state had a range of $M = 1.79$ to $M = 2.50$, with a full group score of $M = 2.24$. Both the state's and the school district's full group scores fell within the range of Jenkins' scores on question 4.8. On question 4.9, Jenkins had a mean score range of $M = 3.15$ to $M = 1.77$ for the magnet school and the non-magnet school respectively, while the school district in this study had a range of $M = 1.52$ to $M = 1.75$, with a full group score of $M = 1.61$, and the state had a range of $M = 1.43$ to $M = 3.14$, with a full group score of $M = 1.62$. Both the state's and the school district's full group scores were below Jenkins' scores on question 4.9.

Differences were seen in the professional development section of the survey based on the level taught. This phenomenon is especially true when examining the state

results for teachers who teach at multiple levels. The scores for those who teach at two levels, including high school, were consistently lower than their counterparts who taught at only one level, while those teachers who taught at the elementary school and the middle school level rated themselves higher on every question in the state results. This could be due to the number of participants in each group, namely $N = 7$ elementary plus middle school teachers and $N = 4$ middle school plus high school teachers. With $N = 14$ participants teaching all three levels, further study is warranted in this area.

For each of the questions in this section of the survey, the scores were lower than those in Jenkins' 2012 study. These results indicate that there has been a shift in attitudes towards professional development since 2012. This could be due to the settings of the schools or to the changes in curriculum since 2012.

For research question one H_0 is rejected because the evidence in multiple questions pointed to level having an effect on a teacher's attitude towards curriculum integration. In each question that displayed significance for research question one, H_0 was rejected with the exception of question 2.5 on the state survey responses.

Research Question 2

After analyzing each of the questions in relation to the demographic data, there were two significant responses from the school district and 13 from the state population. These related to subject taught by itself or in combination with level taught in the two-way ANOVA. The data is not proven to be critical unless it can pass the hypothesis test

based on Fisher–Snedecor Distribution Tables or F score. The hypothesis for research question one was:

H_0 = There is no effect on the attitudes of music specialists based on level taught.

H_1 = There is a difference in the attitudes based on One-Way ANOVA or Two-Way ANOVA based on the Fisher–Snedecor Distribution Tables or F score.

School district findings for the defining curriculum attitudes section of the survey.

The responses to question 2.5, which was a co-equal example based on Bresler's styles that placed music and art on equal terms, indicated differences when the two-way ANOVA was conducted with the subjects and level taught. The interaction between the subject taught and level taught based on the two-way ANOVA for question 2.5 resulted in a score of $F(9, 48) = 3.053$, $p = .006$. The F distribution table states that $F < 2.08$ to reject H_0 . With an F score of 3.053, which provides the evidence to reject H_0 .

For question 2.5, there are changes in the levels of the mean scores based on the subject taught. The ranges for a general music specialist in middle school are from a low score of $M = 2.00$ to a high of $M = 4.00$ for a general music specialist who also taught band in the middle school. With, 75.7% of the respondents strongly agreed with the co-equal example, and a further 27.1% agreed. The strongly agree and somewhat agree scores accounted for 97.1% of the total score, based on Bresler's co-equal example based on Bresler's styles in which the arts and music are used for curriculum integration.

A range variation between subjects can be seen in the responses in this section. For the subservient-related questions, the ranges were: question 2.2, $M = 2.00$ to

$M = 3.50$, question 2.3, $M = 2.00$ to $M = 4.00$, question 2.6, $M = 2.55$ to $M = 3.25$, question 2.8, $M = 2.33$ to $M = 4.00$. Upon close examination, when probing the group that had more than $N = 4$ in the group, the scores were much closer on the same questions: For question 2.2, $M = 2.50$ to $M = 2.95$, question 2.3, $M = 2.85$ to $M = 3.25$, question 2.6, $M = 2.55$ to $M = 3.25$, question 2.8, $M = 2.75$ to $M = 3.20$. The same situation is seen when viewing the co-equal questions based on Bresler's styles of curriculum integration in the defining curriculum section of the survey. The outliers were generated by groups that had a low number of participants and this would need to be studied further.

State findings for the defining curriculum attitudes section of the survey.

Question 2.3's example was subservient based on Bresler's styles of curriculum integration, in which music was placed in a lower role to that of learning facts about Earth Day in science. The state group had $N = 147$, with an $M = 3.01$ and an $SD = .891$ in mean scores based on subject taught. The results from the two-way ANOVA returned a score of $F(15, 113) = 1.905$, $p = .03$. The F distribution table states that $F < 1.76$ to reject H_0 . With an F score of 1.905, which provides the evidence to reject H_0 . The subjects had a range of $M = 2.00$ to $M = 4.00$. When isolating those groups comprised of less than $N = 10$, the range closed to $M = 2.73$ to $M = 3.36$, again showing that the outliers caused the large range scores.

Question 2.4 was a co-equal example based on Bresler's styles in which music and ELA were used together. The mean scores had a range of $M = 2.83$ to $M = 4.00$ on subject taught. It should be noted that the high score was due to some of the participant

groupings numbering less than 10. The others based on the subject taught were in a narrow band from $M = 3.73$ to $M = 3.91$. A one-way ANOVA resulted in a score of $F(13, 133) = 4.426, p = .008$. The F distribution table shows

$F < 1.76$ to reject H_0 . With an F score of 4.426, which provides the evidence to reject H_0 .

Question 2.5 was another co-equal example based on Bresler's styles based on music and visual art. There was a significant result in the two-way ANOVA, with a score of $F(15, 113) = 1.016, p < .001$. The F distribution table states that $F < 1.76$ to reject H_0 . With an F score of 1.016 which provides the evidence to reject H_0 . The mean scores had a range of $M = 2.83$ to $M = 4.00$ based on the subject taught. Again, it should be noted that the high score was due to some participant groupings being less than 10. The others based on subject taught were in a narrow band of $M = 3.43$ to $M = 3.73$. For a complete report, see Appendix G for all the mean scores.

Question 2.7 was a co-equal example based on Bresler's styles of combined music and social studies. There was a significant result the two-way ANOVA testing subject and level taught. With 68.0% strongly agreeing with the co-equal example, and a further 25.9% agreeing, for a total of 93.9%. Again, where the difference was shown was with those who taught the three subjects of choir, general music, and band/orchestra together in schools; 22% of those chose somewhat disagree or strongly disagree. The two who taught the choir, general music, and band/orchestra together were the only ones from the entire population who chose strongly disagree. The two-way ANOVA indicated that the interaction of subject and level taught had an effect of $F(15, 113) = 2.367, p = .005$.

The F distribution table states that $F < 1.76$ to reject H_0 . With an F score of 2.367, which provides the evidence to reject H_0 .

Discussion of defining attitudes section of the survey.

All of the examples, except for question 2.3 which was subservient based on Bresler's styles of curriculum integration, were co-equal. According to Bresler, co-equal curricular integration should be the type of integration that is used. In each of the co-equal examples from both the school district and the state, 93.9% or more of the teachers overwhelmingly chose somewhat agree or strongly agree. The participants who chose strongly disagree taught choir, general music, and band/orchestra together were the only ones who made that choice in the entire population. These were the same two high school teachers who displayed a difference in the levels taught question. H_0 was rejected for all the examples, except for question 2.7 for the school district.

As noted above, for this section most of the answers indicated a difference in mean scores based on subject taught. Due to variability in what was taught across the school district and Tennessee, there was a low number of participants in some of the groupings. The low numbers tended to cause the extreme highs and lows in the ranges, compared to the much smaller ranges in the groups that had larger numbers.

The significance was mainly in the area of the co-equal examples based on Bresler's styles of curriculum integration, which was corroborated by the qualitative answers from the open response questions, with band/orchestra having three positive responses compared to one negative in the school district and 19 positive and 18 negative responses for the state. The choir had 15 positive responses, with two negative responses

for the school district and thirty-three positive responses and five negative responses for the state. The general music group had 18 positive responses and seven negative responses for the school district, with forty-two positive responses and 13 negative responses for the state. Those that taught in the 'other' subject category for the state had five positive responses and one negative response. The same results were seen with the examples based on subject taught, while in research question one they were based on level taught. The responses were all of a positive nature for the examples of co-equal teaching methods for curriculum integration.

When comparing the mean scores with those of Jenkins, the scores are lower than those collected at Chicago Public Schools in 2012. On question 2.3, the Earth Day subservient example, Jenkins had a mean score range of $M = 2.89$ to $M = 3.12$ for the magnet school and the non-magnet school respectively. In comparison, the school district in this study had a range of $M = 2.00$ to $M = 4.00$, with a full group score of $M = 3.01$, and the state had a range of $M = 2.00$ to $M = 4.00$, with a full group score of $M = 3.01$. The full group scores fall within the range of Jenkins' scores.

On question 2.4, a co-equal example based on Bresler's styles using blues music and its role in society, Jenkins had a range of $M = 3.93$ to $M = 3.83$. In the current study the range was $M = 3.00$ to $M = 4.00$ in the school district based on subject taught, with a full group of $M = 3.79$. The state group had a range of $M = 3.71$ to $M = 4.00$, with a full group mean of

$M = 3.80$. Again, the full group scores fall within the range of Jenkins' scores.

Question 2.5 was a co-equal example based on Bresler's styles based on music and visual arts integration. Jenkins' study had a range of $M = 3.50$ to $M = 3.76$ for this question. In this study, the score was $M = 3.00$ to $M = 4.00$ for the school district based on subject taught, with a full group mean of $M = 3.67$. The state had a range of $M = 2.83$ to $M = 4.00$, with a full group mean of $M = 3.63$. Again, the full group scores fall within the range of Jenkins' scores.

Question 2.7 was a co-equal example based on Bresler's styles based on music and social studies integration. Jenkins' study had a range of $M = 3.50$ to $M = 3.76$ for this question. In this study, the score was $M = 3.00$ to $M = 4.00$ in the school district based on subject taught, with a full group mean of 3.73, whereas the state had a range of $M = 2.00$ to $M = 4.00$, with a full group mean of $M = 3.61$. The full group scores fall within the range of Jenkins' scores. While there are variances among the subjects in the present study, the results for this section of the survey are consistent with both Jenkins' scores from 2012 and the answers to the open response questions.

School district results for curriculum attitudes section of survey.

The school district returned significant results for question 3.8 about how free the participants felt to use curricular integrated teaching. The subject taught had a score of $F(10, 59) = 4.701, p < .001$. The F distribution table states that $F < 2.00$ to reject H_0 . With an F score of 4.701, which provides the evidence to reject H_0 . For question 3.8, 98.5% of the population sample agreed or strongly agreed with the question, returning a

mean score of 3.70. Only one person, who taught general music, band/orchestra, and 'other' together answered 'somewhat disagree'.

A complete listing of subject mean scores and full group scores can be seen in Appendix E.

State findings for curriculum attitudes section of the survey.

For question 3.7, namely whether the participants felt that the school was supportive of their efforts to integrate the curriculum, all of the extreme scores with 1.00 or above 3.00 were from the teachers who taught multiple subjects and were in small groupings. A one-way ANOVA between subject taught and level taught resulted in a score of $F(13, 133) = 4.040, p < .001$. The F distribution table states that $F < 2.27$ to reject H_0 . With an F score of 1. 4.040, which provides the evidence to reject H_0 .

For question 3.10, namely whether the participants felt that self-directed planning time was important, the mean scores can be seen in Appendix F. All of the extreme scores with 3.00 or above 4.00 were from the teachers who taught multiple subjects and who were in small groupings.

Discussion of defining attitudes section of the survey.

Discussing the subjects for this section of the survey is made problematic by the extreme mean scores created by the teachers who taught more than one subject and whose categories had a low number of participants. The results for the school district question 3.8 were significant and H_1 was accepted, while the state had one question. The problem lies with the other subject taught area. This area can include subjects such as

music theory and music history, because they are taught rather like a core subject, with very little performing. These two subjects are taught differently from the performance-based subjects of choir and band/orchestra. It is taught differently from the general music classroom. The other category that was affected the scores whenever they were taught with other subjects. All of these mean scores can be seen in Appendix E and F.

When comparing the mean scores with those of Jenkins, the scores are lower than the scores collected at Chicago Public Schools in 2012. On question 3.2 Jenkins had a mean score range of $M = 3.96$ to $M = 3.79$ for the magnet school and the non-magnet school respectively, while the school district in this study had a range of $M = 3.00$ to $M = 4.00$, with a full group score of $M = 3.46$, and the state had a range of $M = 2.83$ to $M = 4.00$, with a full group score of $M = 3.46$. While both the school district's and the state's mean scores were lower than Jenkins' scores, they were consistent with each other.

On question 3.3, Jenkins had a range of $M = 3.57$ to $M = 3.43$. In the current study, it was $M = 3.00$ to $M = 3.47$ in the school district based on level taught, with a full group of $M = 3.33$, while the state had a range of $M = 2.77$ to $M = 4.00$, with a full group mean of $M = 3.25$. Again, the scores were lower than those of the original study, but they were consistent with each other.

Question 3.4 was a co-equal example based on Bresler's styles based on music and visual arts integration. The Jenkins study had a range of $M = 3.64$ to $M = 3.35$ for this

question. In this study, the range was $M = 3.00$ to $M = 4.00$ in the school district based on level taught, with a full group mean of $M = 3.17$, whereas, the state had a range of $M = 2.00$ to $M = 4.00$, with a full group mean of $M = 3.16$. Again, the scores were lower than those of the original study, but were consistent with each other.

This same pattern holds true for the remainder of questions, except for 3.11 about feeling constrained by curricular integrated teaching and 3.12 about having enough time to plan curricular integrated teaching, which were negative questions for which a lower score was wanted. Question 3.11 is an example of a negative score. Jenkins' study had a range of $M = 2.00$ to $M = 1.72$. In this study, it was $M = 1.00$ to $M = 3.00$ in the school district based on level taught, with a full group mean of $M = 2.14$. Although the state had a range of $M = 1.00$ to $M = 3.00$, with a full group mean of $M = 2.22$, in this case the scores were higher. To have a better attitude rating on this question, the score needed to be lower. In this case, the school district and the state teachers indicated a lower opinion in response to each of the questions.

As with the defining attitudes section of the survey, the scores for this study were lower than those collected by Jenkins in 2012. There was a difference in the scores between subjects taught, with those that taught multiple subjects rating the example with a lower mean score than the teachers who taught one subject. The other category had an extreme effect on the other subject ratings in this section. Each time it was used by itself or in combination with another subject, it caused the mean score to be on one of the extreme ends of the spectrum.

In this section, many of the responses resulted in scores that were lower than those of Jenkins in 2012. Additionally, in the area of subject taught, there was a variance in the ranges of the subjects taught, but when adjusting for the extreme range scores due to a low number of participants in a grouping, the scores fell within a small but consistent range for both school district and state. This is evidenced by the closeness of the full group scores between the school district and the state.

School district results for professional development section of survey.

The school district had significant results for questions 4.5, and 4.6. Question 4.5 was whether the participants had received useful information in the professional development courses they had taken. The mean scores ranged from $M = 1.00$ to $M = 3.50$, with a full group mean of $M = 2.44$. The results from the one-way ANOVA were $F(10, 59) = 2.460, p = .007$. The F distribution table states that $F < 2.00$ to reject H_0 . With an F score of 2.460, which provides the evidence to reject H_0 . Question 4.6 was whether the information received built connections between subjects. The range was from $M = 1.00$ to $M = 3.50$, with a full group mean of $M = 2.36$. The results from the one-way ANOVA were $F(10, 59) = 2.622, p = .010$. The F distribution table states that $F < 2.00$ to reject H_0 . With an F score of 2.622, which provides the evidence to reject H_0 .

State results for professional development section of survey.

The state did not have any significant results in this section of the survey. This area of the survey was not devoid of information. For a complete report of the scores based on subjects, see Appendix F. The responses in this section indicate the same

problems with extreme ranges in the subject groupings that had few participants. A complete report of the range scores and full group scores will be seen in the discussion section below.

Discussion of defining attitudes section of the survey.

Both the school district and the state groups had lower scores for the professional development section of the survey. While in the previous sections the average was between 2.00 and 4.00, in the professional development section the average was between 1.50 and 2.50. These scores indicate a much lower satisfaction rating for professional development.

When comparing the mean scores with those of Jenkins, the current study's scores are lower than those collected at Chicago Public Schools in 2012. On question 4.2, Jenkins had a mean score range of $M = 3.14$ to $M = 2.67$ for the magnet school and the non-magnet school respectively, while the school district in this study had a range of $M = 1.00$ to $M = 3.00$, with a full group score of $M = 1.94$, and the state had a range of $M = 1.00$ to $M = 2.36$, with a full group score of $M = 1.99$. On question 4.3 Jenkins had a mean score range of $M = 3.54$ to $M = 2.08$, while the school district in this study had a range of $M = 1.00$ to $M = 3.00$, with a full group score of $M = 2.01$, and the state had a range of $M = 1.00$ to $M = 2.36$, with a full group score of $M = 1.87$. On question 4.4 Jenkins had a mean score range of $M = 1.43$ to $M = 1.25$, while the school district in this study had a range of $M = 1.00$ to $M = 1.65$, with a full group score of $M = 1.40$, and the state had a range of $M = 1.00$ to $M = 2.50$, with a full group score of $M = 1.53$. On

question 4.5 Jenkins had a mean score range of $M = 3.52$ to $M = 2.58$, while the school district in this study had a range of $M = 1.00$ to $M = 3.50$, with a full group score of $M = 2.44$, and the state had a range of $M = 1.00$ to $M = 3.00$, with a full group score of $M = 2.23$. On question 4.6 Jenkins had a mean score range of $M = 3.46$ to $M = 2.56$, while the school district in this study had a range of $M = 1.00$ to $M = 3.50$, with a full group score of $M = 2.36$, and the state had a range of $M = 1.00$ to $M = 3.00$, with a full group score of $M = 2.14$. On question 4.7 Jenkins had a mean score range of $M = 3.20$ to $M = 2.43$, while the school district in this study had a range of $M = 1.00$ to $M = 3.00$ with a full group score of $M = 2.31$ and the state had a range of $M = 1.00$ to $M = 3.00$ with a full group score of $M = 2.14$. On question 4.8 Jenkins had a mean score range of $M = 3.19$ to $M = 2.51$, while the school district in this study had a range of $M = 1.00$ to $M = 3.50$, with a full group score of $M = 2.57$, and the state had a range of $M = 1.50$ to $M = 3.00$, with a full group score of $M = 2.24$. On question 4.9 Jenkins had a mean score range of $M = 3.15$ to $M = 1.77$, while the school district in this study had a range of $M = 1.00$ to $M = 4.00$, with a full group score of $M = 1.61$, and the state had a range of $M = 1.00$ to $M = 2.00$, with a full group score of $M = 1.62$. All in all, both the school district and the state groups had lower scores than Jenkins, with the exception of 4.4, in which the school district subset had a higher mean score than any of the other groups on taking classes in college related to curriculum integrated teaching, and question 4.8, in which the school district group rated better than the regular school teachers in Jenkins' study. In all of the other questions, both the school district and the state mean scores were lower than Jenkins' scores.

For research question two H_0 is rejected because the evidence in multiple questions pointed to subject taught having an effect on a teacher's attitude towards curriculum integration. In each question that displayed significance for research question one, H_0 was rejected with the exception of question 2.5 on the state survey responses.

Further Findings Based On Demographic Sub-groups

The primary purpose of this research study was to measure if whether there was a difference in the attitudes of music specialists due to level and subject taught. Further findings were examined that relate to the demographic areas of years of experience, gender, and degree earned. Each of these areas returned significant results for some questions and therefore seems to play a part in forming the teacher's attitudes towards curriculum integration.

Years of experience.

On question 3.4, about being confident in their ability to integrate core subjects, the state teachers had a result of $F(6, 140) = 3.801, p = .002$ for years of experience. Table 45 shows means based on years of experience, with the 0-5 years of the experience grouping having the lowest mean core of 2.61, with the other subsets, except for 16-20 years of experience, being above 3.00, and teachers who have taught for more than 30 years of experience having the highest mean score at 3.63. This is to be expected, because the younger teachers have less experience with curriculum integration and are mainly focused on teaching their primary subject of music.

The most significant section in which years of experience was significant was in the school district in the professional development section of the survey. In this section, every result was significant in the school district group, except for question 4.4. The surprise in this section was that the teachers with the lowest mean scores on all but question 4.2 were those in the 30 years or more experience level, while those with 26 to 30 years of experience had the highest mean score on the same questions. All of the other teachers grew as they gained experience from the beginning of their careers.

Gender.

Gender was a factor in the responses to one questions in the school district group and for seven questions in the state group. In every significant response, the males had a lower mean score than those of females. For all but four results from both the school district and state groups, the males' mean scores were lower. Question 2.3 was the exception for both the school district and state groups. In this case, the example was a subservient one, for which the females had a mean score of $M = 3.00$ and males had a mean of $M = 3.04$ for the school district, with the males being predominantly at the middle school and high school levels, while the females were predominantly at the elementary school level. In the state group, the females had a score of $M = 2.99$ and the males had a score of $M = 3.05$, with the males being predominantly teachers at the middle school and high school levels, while females were predominantly teaching at the elementary school level. The results for question 2.7, a co-equal example based on Bresler's styles from the defining curriculum section of the survey, were significant for the state, with a score $F(5, 141) = 15.727, p = .018$. The school district score for the

females on this question was $M = 3.83$ and the males had a score of $M = 3.57$, while the state had $M = 3.71$ for the females and the males had a score of $M = 3.46$. Question 3.10 about the importance of self-directed planning time yielded significant results for both school district and the state. The school district had a score of $F(1, 68) = 4.152, p = .045$, while the state groups' score was $F(1, 145) = 7.859, p = .006$. The mean for the females on this question was $M = 3.74$ and males had a score of $M = 3.39$ for the school district, while the state had $M = 3.71$ for females and $M = 3.41$ for males.

Degree earned.

Significance for degree earned was seen mainly for the results for the professional development section of the survey. The school district group had significant results for question 2.7, but the focus will be primarily on the professional development section. In the latter section, the school district returned one set of results that were significant, while the state group had three significant results. The results for question 4.9, about whether the participants had received professional development training related to curriculum integration, were significant for both the school district and the state. The school district group scored $F(2, 67) = 6.123, p = .004$, while the state group scored

$F(2, 144) = 3.804, p = .025$. For the school district, those with Bachelor's Degrees had a score of $M = 1.13$, Master's Degrees $M = 2.00$, and Doctoral Degrees $M = 1.67$, while the state group's scores were Bachelor's Degrees $M = 1.38$, Master's Degrees $M = 1.83$, and Doctoral Degrees $M = 1.89$. The results indicated that those with Master's Degrees were more likely to have attended professional development courses on curriculum integration.

Question 4.6 was about whether the participants' professional development information had enabled them to formulate new meanings regarding curriculum integration. Again, the participants with Master's Degrees made the most of the new information, with a rating of $M = 2.36$, the Bachelor's Degree teachers had a score of $M = 1.94$ and Doctoral Degree subset scoring $M = 1.89$. The final significant result related to degree earned was question 4.8, about whether the information received was adaptable to their teaching environment. Those with Master's Degrees made the most of the new information with $M = 2.46$, with the Bachelor's Degree participants having a score of $M = 2.03$ and the Doctoral Degree subset scoring $M = 2.11$. Notably, the Doctoral Degree participants were not asked what their degree subject was. Those who have a doctorate in performance could have a different opinion as compared to someone with a doctorate in music pedagogy or education. Another aspect that should be noted is that all of the scores fell into the somewhat disagree to strongly disagree range. Thus the participants did not seem to feel that the information received had enabled them to make new connections pertaining to curriculum integration.

Implications

This purpose of this research study was to measure music specialists' attitudes to curriculum integration, with the aim of examining whether there was a difference in attitudes between levels taught and subject taught. Before levels and subjects can be addressed, the general responses of the entire sample population must be discussed. The teachers had positive attitudes to curriculum integration, but expressed concerns in the professional development section of the survey.

In both the school district and the state groups, the participants indicated that they felt it was important for students to experience curriculum integration. These findings are similar to those of Jenkins (2012), although the participants of this study did not agree as strongly as in Jenkins' study. Colwell (2008) also indicated that music specialists held a positive attitude towards curriculum integration. Furthermore, both Colwell and Jenkins indicated that the teachers were confident in their ability to integrate other subjects, particularly core subjects, into their music curricula. The current findings indicate a similar view, in that the participants agreed that they were confident their ability to integrate core subjects into their curriculum. Jenkins indicated that music specialists felt confident in their ability to integrate other arts subjects into the music curriculum, and this was echoed in this study. Another impact that echoed Colwell (2008) was the sentiment about not having enough time to perform curriculum integration, thus causing the teachers to decrease the integration of other subjects into their curricula. This study yielded similar results in relation to questions about time. The results for question 3.12 indicated that both the school district and the state teachers felt that they did not have enough time to devote to curriculum integration. This could be in class time or planning time, as indicated in the professional development section results.

A further area of positive results relates to the defining attitudes section of the survey. For all of the co-equal examples, the music specialists from both the school district and the state agreed or strongly agreed that the example was a positive example of curriculum integration, with all the results being above 95% agreement with every co-equal example based on Bresler's styles of curriculum integration. The discrepancy occurred in the subservient examples. In these examples, the ranges were wider, meaning

that the results were less significant. The researcher was not able to determine whether this was a result of the teacher's attitudes or the environment. Many of the Pearson Product-Moment Correlations revealed a low amount of correlation, with linear regressions revealing a small R and R^2 for the questions that were significant. In each of these cases, the level taught or subject taught were only small contributors to the formation of attitudes towards curriculum integration. Research indicates that each school has its own environment, and that teachers' and school administrators' attitudes can affect that environment (DuFour et al, 2008; Muhammad, 2009). Zdzinski et al. (2007) indicates that school policies contribute to the difference in teacher attitudes. In this case, could it be the policy about teacher evaluation? In Tennessee, in the TEAM model on the instructional planning rubric portion, if a teacher wants to obtain a score of 5, which is the highest score, he or she must include links to other disciplines. There is a mandate to integrate the curriculum in the state music standards, and standard nine relates entirely to curriculum integration. The link between policy demands such as requiring curriculum integration as part of teacher evaluation requires further study.

The results from the professional development section were an area of concern. When questioned about having appropriate training about curriculum integration, both the state and the school participants returned low scores in the 'somewhat disagree' to 'strongly disagree' range. When asked if they had received training through a college course, the school district teachers had a more favorable answer with 'disagree', as compared to the state groups answers, which fell into the 'strongly disagree' range. Responses to questions in which the participants were asked whether the information gained in a professional development activity was useful and applicable to their teacher

environment, the results were still in the 'disagree' range. These results indicate that further and better planned professional development is needed in this area. For example, Colwell (2008, 2004) performed a collaborative professional development session that brought together arts specialists and core subject teachers from all levels. This type of professional development needs to be considered and should be welcomed by the teachers. Question 3.9 was about teacher collaboration and the rating from both the school district and the state were in the agree to strongly agree range.

As indicated above, the levels taught had an impact on the teachers' attitudes to curriculum integration. Throughout the study, the differences in mean scores were examined on results that indicated significance. The wide ranges based on level taught displayed these differences in attitudes. Hattie (2009) indicated that curriculum integration had differing degrees of effectiveness at the differing levels of elementary school, middle school, and high school. In this study, when questioned about the support the music specialist felt they received from their schools in terms of curriculum integration, the high school teachers indicated the highest level of support, followed by elementary school educators, and then middle school participants for those that taught at only one level. An interesting phenomenon revealed by this study was that teachers who taught at two or more levels had much higher scores throughout the attitudes section of the survey. Those that taught at the middle school and high school levels consistently had much lower scores. This data must be considered as only preliminary and needs to be further studied due to the low number of participants in each level category.

The results indicated that some differences were related to subjects. Although not as strong as the level taught variable, the subjects accounted for many of the differences that were displayed in the attitudes section of the survey. The subject often had an effect in combination with the level taught. Bush (2007) indicated the subjects did relate to preferences for the types of curriculum integration adopted. In this study, the general music teacher specialists ranked curricular integration higher than the choral and band orchestra specialists. The open response results corroborated this: the general music teachers gave 76% positive feedback on curriculum integration, the choir teachers 87% positive feedback, and the teachers of 'other' music subjects gave 83% positive feedback. 51% of the band/orchestra group provided comments about not having enough time to integrate, or even that the core curriculum classrooms did not integrate their subject. The band teachers are among the most visible members of the performing arts community, and thus experience pressure to ensure that their groups sound and look good, because the community rates them only on the sound and appearance.

Gender was a factor; the males rated themselves lower on most of the questions. In this study, most of the males taught the subject of band/orchestra and at the middle school and high school levels. This could have affected both level taught and subject taught. Further study is needed to discern why males are not teaching general music at the elementary level.

The variable years of experience was significant in the professional development section. While the scores increased as the years of experience increased on the results for professional development, the chances of the teachers receiving knowledge that impacts

their teaching ability should get higher. This was the case, except for teachers who had more than 30 years of experience. On each question in the professional development section these teachers rated themselves in the lower range of scores as compared with the teachers who had between 15 to 29 years of experience. This could be because they have become a survivor teachers who do and want to do only what is needed to get through their time until the end of the year and retirement (Muhammad, 2007). Muhammad indicated that these teachers could be fundamentalist; that is, resistant to change, and only wanting to teach music for music's sake.

Significance

The findings from this research will be useful to those who are developing professional development courses on curriculum integration. Bush (2007) indicated that teachers of different subjects had differing preferences related to the type of professional development they need. The results of this study indicated that there is a difference in the levels taught. Thus, the type of professional development created needs to be tailored to the subject and level taught. For instance, choir classes at the middle school and high school would need curriculum integration that is focused on ELA and interpreting the text of the music to help the singers convey the meaning of the music. General music in elementary school would need a general overview of what is taught on each level and in each subject in the school, with a collaborative teacher aiding them to make the connections. Band/orchestra and all other subjects could have a social studies review in which major events of a time period and a place are conducted, which could guide the students to a better understanding of how the music fits into a time period and society.

This would allow the music specialist to aid the students to make connections to different periods and cultures. Each of these examples need to be studied in depth to meet music specialists needs, otherwise, as shown in this study, they will not gain any information that they can apply to their situation. The music specialists do need to have professional development on core subjects to better integrate them into the music classroom. Munroe (2015) stated that where music had natural connections to other subjects, these were the most powerful connections, and forcing the integration did not help the cause of either subject in the lesson that was being integrated. Curriculum integration should help add to the “we” mentality needed in schools to help all students learn. Eisner (2009) and Dewey (1900) stated that the disciplines should not be taught in isolation and that art and life should have a connection.

Limitations

The first limitation of this study is that it was conducted using two pools of participants: first, a local school district in the state of Tennessee and second, a statewide Tennessee Music Educators Association membership. The local school district provides a convenience sample while the membership of those in the Music Educators Association are more purposeful providing a larger pool of practicing music teachers in a state in the American southeast. With the survey being completed via an online survey link that was emailed to potential participants. The return rate of the school district was 78%, while the return rate for the state population was only 11.3%. Implications were drawn from both the school district and the state groups. If the researcher were to conduct this study again it would be in a small group interview setting at a professional development session or a music conference. By conducting interviews, the researcher would be able to control for

the races of the participants to help ensure that an even mixture of races was represented. By performing the study in this manner, the researcher would then be able to ask follow-up questions. This was not allowed because of the stipulation by TNMEA that no identifiable information such as name or school district should be collected. Without being able to ask follow-up questions, the researcher did not receive many responses to the open response question explaining why the participants did not think curriculum integration worked. By conducting qualitative research in an interview or small group setting, such responses would add more value to the quantitative answers.

The second limitation was given the large number of tests run there is a high probability that some cases of Type I and Type II errors exist. Bonferroni correction models and having $p \leq .01$ were completed in an attempt to counteract the likelihood of Type I and Type II errors.

A third limitation was created by the requirements in the questionnaire. When asking about levels taught, further insight was gained by allowing the participants to choose multiple levels. When the responses to the subject taught category were analyzed in the same way as the other categories, the answers became problematic because allowing multiple subjects to be selected this created small groups that made the ranges wider. If the research was conducted again, the researcher would have the participants choose the main subject that they teach and allow only one choice on that answer.

The fourth limitation was the limited amount of research available about integrating core subjects into the music classroom. When searching for information on the subject, it was found that most of the information on curriculum integration in general

was on technology integration, much the same as what Bruner (1960) did when speaking on curriculum integration. When searching for music integration, the returned articles were mainly about how to integrate music into the regular classroom and not how to integrate core subjects into the music classroom.

Additional Research

Further research is needed on curriculum integration, and one particular area of need is to research the professional development needs of music specialists. This needs to be based on level taught and subject taught to help create a professional development opportunity in which the music specialists can acquire the information required to meet their needs in the classroom. A qualitative study should be conducted to ascertain how current music specialists obtain the information they use when creating a lesson that integrates other subjects, such as the arts or core subjects. Also, as to what specific areas of curriculum integration the teachers are interested in receiving.

As seen in this study, there is a difference between the attitudes of music specialists based on levels taught, such as elementary school, middle school, and high school. The music specialist's attitudes were affected by subject taught based on the subjects of general music, choir, or band/orchestra. Further research should be conducted using the data from the portfolio assessment in Tennessee to examine whether there are any differences in the abilities of music teachers based on level taught and subject taught.

Further research needs to be conducted to the ascertain reasons for which males do not want to teach general music in elementary schools. This can be built on the

research that has already been conducted by Robinson (2017) on the reasons for which males do not enter into teaching elementary general music.

A further area of research that should be conducted in the area of mandated curriculum integration, particularly whether it has an effect. The state and national standards in music education have stipulated curriculum integration as a standard. Tennessee uses curriculum integration as part of the teacher evaluation system. What effect do these mandates have on the attitudes toward curriculum integration and the teacher's results from teaching an integrated lesson?

Conclusion

More information is needed on integrating core subjects into the music curriculum. While music specialists at every level taught and subject taught have a positive attitude towards curriculum integration, there are some levels and subjects that are lower than others. An area of concern for all levels taught and subjects taught is in the area professional development. Despite curriculum integration being part of Tennessee music standards since 1994, many music specialists do not feel that they have enough training in college or later professional development to conduct curriculum integration. The full group from both the school district and the state agreed on their ability to integrate. In this case, the missing component was training on curriculum integration. The form that this training takes is up to future researchers to ascertain. The current study simply provides the information that training is needed based on the level taught and subject taught to make it applicable to the music specialists' teaching environment.

For some music specialists, teaching is about teaching music for music's sake, as was commented on several times in the open response questions. In order to change attitudes like this we must begin with a change in attitudes and have music specialists begin in small steps with curricular integration (Munroe, 2015; Wiggins, J & Wiggins, R, 1997; Wiggins, R, 2001). Once this small change is made, then, according to Pfeffer and Sutton (2000), a change in behavior can occur. Muhammad (2007) stated the in some cases attitudes must change in order to create a better learning environment. Just because that a person has the right attitude does not mean that they can teach the subject effectively. Changing an individual's attitude to curriculum integration means giving them the right training and showing them that the results will indeed help in their classroom. While it may be a music classroom, it is still a classroom that is in a school, and each school's job is to create well-rounded human beings who can function in society.

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APPENDICES

Appendices

Appendix A 5th Grade Standards for Tennessee Complete

Music Curriculum 5th Grade

Standard 1.0 Singing

Students will sing, alone and with others, a varied repertoire of music. Grade Level Expectations (GLEs)

The student will

- 1.1 Sing melodies in varied modes with appropriate style, accurate pitch and rhythm.
- 1.2 Demonstrate the ability to sing expressively using proper vocal technique.
- 1.3 Demonstrate skills for singing in parts.

Checks for Understanding

- 1.1 Sing, alone, a simple melody with accurate rhythm and pitch (solfege and/or lyrics). Sing, with others, a simple melody with accurate rhythm and pitch (solfege and/or lyrics). Demonstrate various terraced dynamic levels while singing a melody. Demonstrate ability to change dynamic levels (crescendo and decrescendo) while singing a melody. Demonstrate ability to follow a conductor on an accelerando and a ritardando. Demonstrate the ability to use proper breath support and head and chest voice to sing a four-measure phrase at given tempos.
- 1.2 Demonstrate grade-appropriate vocal technique when singing a melody with a large group. Demonstrate grade-appropriate vocal technique when singing a melody with a small group. Demonstrate grade-appropriate vocal technique when singing a melody alone. Demonstrate a smooth transition between head and chest tones. Demonstrate beginning and ending consonants and pure vowels for good enunciation. Demonstrate jaw flexibility and the use of teeth, tongue and open throat for good vocal production.
- 1.3 Sing a partner song in small and/or large groups. Sing the melody of a round/canon in large and/or small groups. Sing a round/canon in two and/or three parts in a large and/or small

group. Demonstrate the ability to sing an assigned part in two-part harmony.

Sing an assigned line in two-part harmony with others.

Student Performance Indicators (SPIs)

The student is able to

- 1.1.1 Sing a melody with accurate pitch, rhythm, dynamics, and tempo.
- 1.1.2 Sing a melody with accurate pitch, rhythm, dynamics, tempo, and phrasing.
- 1.1.3 Sing a melody with accurate pitch, rhythm, and musicality.
- 1.2.1 Exhibit good posture, grade-appropriate diction, breath control, and tone in both head and chest voice.
- 1.2.2 Demonstrate proper posture, grade-appropriate diction, breath control, and tone in both head and chest voice.
- 1.2.3 Demonstrate proper vocal technique in both head and chest voice.
- 1.3.1 Sing partner songs and/or rounds and canons.
- 1.3.2 Sing rounds and canons while maintaining tempo and pitch.
- 1.3.3 Sing two-part harmony of varied repertoire.

Standard 2.0 Playing Instruments

Students will perform on instruments, alone and with others, a varied repertoire of music. Grade Level Expectations (GLEs)

The student will

- 2.1 Demonstrate simple and complex patterns including syncopation in various meters on pitched and/or non-pitched instruments using correct technique.
- 2.2 Exhibit skill in playing simple orchestrations on pitched and/or non-pitched instruments using correct technique.
- 2.3 Perform rhythmic and/or melodic accompaniments using correct technique.
- 2.4 Perform with appropriate expressive qualities in various genres.

Checks for Understanding

- 2.1 Perform, alone, teacher selected, developmentally and/or grade-appropriate rhythms in duple and triple meter on non-pitched instruments using proper technique.
Perform, with others, teacher selected, developmentally and/or grade-appropriate rhythms in duple and triple meter on non-pitched instruments using proper technique.
Demonstrate an understanding of syncopated rhythms on non-pitched instrument in

- small and/or large groups.
- 2.2 Play, alone, a teacher-selected example, demonstrating developmentally and/or grade-appropriate technique and correct notes on a pitched instrument.
Play, with others, a teacher selected example, demonstrating developmentally and/or grade-appropriate technique and correct notes on a pitched instrument.
- 2.3 Demonstrate, alone, teacher-selected rhythmic accompaniments in duple and triple meter. Demonstrate, with others, teacher-selected rhythmic accompaniments in duple and triple meter.
Demonstrate, alone, teacher-selected melodic accompaniments in duple and triple meter. Demonstrate, with others, teacher selected melodic accompaniments in duple and triple meter.
Perform, with expression, a part from a simple score for pitched instruments (e.g., an Orff instrumentation score), a rhythmic score for non-pitched instruments, and/or a score for recorder ensemble.
- 2.4 Play a melody with tempo and/or dynamic changes and appropriate phrasing in a large group setting.
Play a melody with tempo and/or dynamic changes and appropriate phrasing in a small group setting.
Demonstrate, with others, the ability to follow the tempo markings in a piece of music, as set by the conductor or with a recording.
Demonstrate developmentally and/or grade-appropriate use of expressive markings.

Student Performance Indicators (SPIs)

The student is able to

- 2.1.1 Perform basic rhythmic patterns (dotted half notes, half notes, quarter notes, paired eighth notes, half rests, quarter rests) in duple and triple meters on non-pitched instruments using proper technique.
- 2.1.2 Perform rhythmic patterns (dotted half, half, dotted quarter, quarter, eighth, and sixteenth notes, and half, quarter, and eighth rests) in duple and triple meters on non-pitched instruments using proper technique.
- 2.1.3 Perform simple and complex rhythm patterns in small and large ensembles.
- 2.2.1 Play, alone or in groups, simple melodies based on selected major scales including steps, skips, leaps and repeated notes (four-measure minimum).
- 2.2.2 Play melodies based on selected major and minor scales.
- 2.2.3 Play, with others, ostinati, partner songs, and/or rounds/canons.
- 2.3.1 Perform an accompaniment (two-note chords, broken two-note chords, three-note chords and/or arpeggios) in duple and triple meter using basic rhythms on pitched instruments, and an accompaniment using varying rhythm patterns (dotted half notes, half notes, quarter notes, paired eighth notes, quarter rests) on non-pitched instruments.
- 2.3.2 Perform an accompaniment on pitched or non-pitched instruments using an

- orchestration that includes varying rhythms, pitches, and parts.
- 2.3.3 Perform an accompaniment on pitched or non-pitched instruments using an orchestration that includes varying instrumentation, rhythms, and pitches.
- 2.4.1 Demonstrate dynamics, phrasing, and tempo changes when playing a given example.
- 2.4.2 Demonstrate expressive qualities in performance (e.g., dynamics, balance, tempo changes, phrasing) of a given example. Demonstrate, through performance, expressive qualities in an ensemble setting.

Standard 3.0 Improvising

Students will improvise melodies, variations, and accompaniments. Grade Level Expectations (GLEs)

The student will

- 3.1 Improvise, vocally and instrumentally, a two- to four-measure melody on a pentatonic scale.
- 3.2 Improvise a two- to four-measure rhythmic accompaniment to varying musical styles.
- 3.3 Improvise two- to four-measure question and answer phrases.
- 3.4 Improvise a two- to four-measure melodic accompaniment within teacher-given parameters.

Checks for Understanding

- 3.1 Improvise a developmentally and/or grade-appropriate melody using a pentatonic scale on a pitched instrument.
- 3.2 Improvise developmentally and/or grade-appropriate rhythms using body percussion, pitched, and/or non-pitched instruments while keeping a steady tempo.
- 3.3 Improvise developmentally and/or grade-appropriate question and answer phrases.
- 3.4 Improvise, on instruments, a developmentally and/or grade-appropriate accompaniment or ostinato accompaniment.

Student Performance Indicators (SPIs)

The student is able to

- 3.1.1 Improvise an eight-beat melody based on a pentatonic scale.
- 3.1.2 Improvise, on a variety of instruments (may include recorder), an eight-beat melody based on a pentatonic scale.
- 3.1.3 Improvise, on a variety of instruments (including recorder) an eight-beat melody

using a pentatonic scale

- 3.2.1 Improvise an eight-beat pattern using half notes, quarter notes, paired eighth notes, and/or quarter rests while maintaining a steady tempo.
- 3.2.2 Improvise an eight-beat pattern using half notes, quarter notes, paired eighth notes, half rests, and/or quarter rests while maintaining a steady tempo. Improvise a sixteen-beat pattern using half notes, quarter notes, paired eighth notes, sixteenth notes, half rests, and quarter rests while maintaining a steady tempo.
- 3.3.1 Improvise, in pairs, a four- or eight-beat question and answer phrase using body percussion or non-pitched instruments.
- 3.3.2 Improvise, in pairs, a four- or eight-beat question and answer phrase on pitched instruments (may include recorder).
- 3.3.3 Improvise, in pairs, an eight- or sixteen-beat question and answer phrase on pitched instruments (may include recorder).
- 3.4.1 Improvise a simple eight-beat accompaniment on body percussion or non-pitched instruments within teacher-given parameters.
- 3.4.2 Improvise a simple eight-beat accompaniment on pitched instruments within teacher-given parameters.
- 3.4.3 Improvise an eight-beat accompaniment on pitched instruments based on a pentatonic scale.

Standard 4.0 Composing

Students will compose and arrange music within specified guidelines.

Grade Level Expectations (GLEs)

The student will

- 4.1 Create, individually or in groups, a simple vocal or instrumental two-part composition using teacher-given parameters.
- 4.2 Compose a short melodic vocal or instrumental introduction, interlude and/or coda to given melodies on major and/or minor pentatonic scales.
- 4.3 Create an arrangement of a familiar melody using instruments and/or movement.

Checks for Understanding

- 4.1 Create, in a group, a teacher-guided, short vocal or instrumental composition on a pentatonic scale.
Create an ostinato accompaniment for a short melody.
Create a short melody and an ostinato to accompany it.
- 4.2 Create, in a large group setting, a teacher-guided introduction.

Create, in a small group setting, a short introduction.
 Create, in a small group setting, an interlude using teacher-given parameters.
 Demonstrate the ability to locate a coda in a music score.
 Create, in a small group setting, an introduction, interlude and/or coda for a selected music example. Change the rhythm of a familiar melody. Change the meter of a familiar melody.

Student Performance Indicators (SPIs)

The student is able to

- 4.1.1 Create and demonstrate, in a group setting, a four-measure instrumental or vocal melody based on a pentatonic scale.
- 4.1.2 Create and demonstrate, in a group setting, a four-measure instrumental or vocal melody based on a pentatonic scale with an ostinato accompaniment.
- 4.1.3 Create and demonstrate, in a group setting, a four-measure instrumental or vocal melody based on a pentatonic scale with a simple chordal accompaniment.
- 4.2.1 Create and demonstrate a short introduction, interlude, and coda to a given melody.
- 4.2.2 Create and demonstrate a two-measure interlude for a given melody.
- 4.2.3 Create and demonstrate a two- to four-measure melodic interlude for a given melody.
- 4.3.1 Create an arrangement of a simple melody by changing one element (e.g., rhythm, meter, tempo).
- 4.3.2 Create an arrangement of a given melody by changing one element (e.g., rhythm, meter, tempo) and demonstrating through movement, singing, or playing an instrument.
- 4.3.3 Create an arrangement of a given melody by changing harmony, meter, tempo, or parts of the melody and demonstrating through movement, singing, or playing an instrument.

Standard 5.0 Reading and

Notating Students will read and

notate music. Grade Level

Expectations (GLEs) The student

will

- 5.1 Identify and explain symbols represented in rhythm and melody.
- 5.2 Use symbols to read, notate and perform.
- 5.3 Identify and interpret terms and symbols referring to musicality.

Checks for Understanding

- 5.1 Demonstrate an understanding of treble clef pitches (including ledger lines) by notating a given example.
Determine the meter of a music example by identifying the number of beats in each measure.
- 5.2 Sing and/or play intervals using teacher-given solfege. Sing and/or play melodies using teacher-given solfege. Notate, using standard notation, a given example.
- 5.3 Identify dynamic markings through a teacher-guided classroom activity. Identify directional markings through a teacher-guided classroom activity. Follow dynamic markings in teacher-given listening examples. Follow directional markings in teacher-given listening examples. Demonstrate, vocally, an understanding of dynamic and directional markings.
Demonstrate, instrumentally, an understanding of dynamic and directional markings. Demonstrate an understanding of tempo markings through a listening map of a recorded musical selection.
Demonstrate an understanding of tempo markings, vocally or instrumentally. Demonstrate an understanding of phrasing, vocally or instrumentally, within a teacher- given music selection.

Student Performance Indicators (SPIs)

The student is able to

- 5.1.1 Compare and contrast meters (duple and triple); identify note names in the treble clef, note values (whole notes, half notes, quarter notes, paired eighth notes), and rest values (half rests, quarter rests).
- 5.1.2 Compare and contrast meters (duple and triple); identify note names in treble clef, note values (whole notes, dotted half notes, half notes, quarter notes, paired eighth notes, sixteenth notes), and rest values (half rests, quarter rests).
- 5.1.3 Compare and contrast meters (duple and triple); identify note names in treble clef, note values (whole notes, dotted half notes, half notes, quarter notes, paired eighth notes, sixteenth notes), and rest values (half rests, quarter rests, eighth rests).
- 5.2.1 Demonstrate pitch understanding by using solfege or other teacher-provided symbols.
- 5.2.2 Demonstrate an understanding of treble clef pitches by singing intervals using solfege and letter names or by playing intervals.
- 5.2.3 Demonstrate an understanding of treble clef pitches by singing intervals using solfege and letter names and by notating those pitches.
- 5.3.1 Identify and demonstrate dynamic markings (e.g., fortissimo, forte, mezzo forte, mezzo piano, piano, pianissimo, crescendo, decrescendo) and tempo markings (e.g., andante, largo, presto, ritardando).
- 5.3.2 Identify and demonstrate dynamic markings (e.g., fortissimo, forte, mezzo forte,

mezzo piano, piano, pianissimo, crescendo, decrescendo), tempo markings (e.g., andante, largo, presto, ritardando), and articulation markings (e.g., staccato, marcato, accent).

- 5.3.3** Identify and demonstrate dynamic markings (e.g., fortissimo, forte, mezzo forte, mezzo piano, piano, pianissimo, crescendo, decrescendo), tempo markings (e.g., andante, largo, presto, ritardando), and articulation markings (e.g., staccato, marcato, accent) in music selections.

5.3.4 Standard 6.0 Listening and Analyzing

Students will listen to, analyze and describe

music. Grade Level Expectations (GLEs)

The student will

- 6.1 Explain characteristics of same and different sections.
- 6.2 Identify and classify, visually and aurally, orchestral instruments individually and by family.
- 6.3 Analyze, orally and written, the characteristics of vocal and instrumental musical selections using appropriate music vocabulary.
- 6.4 Compare and contrast various styles and genres of music, both vocal and instrumental.

Checks for Understanding

- 6.1 Identify rondo form in a listening example.
Demonstrate the similarities and differences of rondo form and AB and ABA forms. Demonstrate an understanding of rondo form using movement and manipulatives.
Identify theme and variations in a listening example.
Demonstrate an understanding of theme and variations using movement and manipulatives.
- 6.2 Classify, visually or aurally, given instruments into their orchestral families.
- 6.3 Select appropriate vocabulary from a word bank to describe a music selection. Compare and contrast given music selections using a graphic organizer.
- 6.4 Classify selected listening examples by style and/or genre.

Student Performance Indicators (SPIs)

The student is able to

- 6.1.1 Create a pictorial representation of different sections of complex forms (e.g., rondo, theme and variations) of music.

- 6.1.2 Create movement patterns to demonstrate different sections of complex forms of music.
- 6.1.3 Identify and explain, orally and/or written, complex forms of music.
- 6.2.1 Identify, visually, teacher-selected orchestral instruments and group into families.
- 6.2.2 Identify, through listening examples, teacher-selected instruments, individually and as families.
- 6.2.3 Identify, aurally, teacher-selected orchestral instruments in ensembles.
- .
- 6.3.1 Classify the elements of music using teacher-given vocabulary.
- 6.3.2 Describe a listening example using correct music vocabulary.
- 6.3.3 Compare and contrast listening examples using correct music vocabulary.
- 6.4.1 Classify styles and/or genres (e.g., lullaby, march, jazz, folk song, patriotic, work song, spirituals, Tennessee songs, Civil War songs, ethnic music) using teacher-given vocabulary.
- 6.4.2 Analyze teacher-given styles and/or genres of music.
- 6.4.3 Analyze styles and genres of music using teacher-given parameters.

Standard 7.0 Evaluating

Students will evaluate music and music

performances. Grade Level Expectations (GLEs)

The student will

- 7.1 Devise and apply criteria for evaluating music and music performances.
- 7.2 Demonstrate proper audience etiquette and evaluate audience behavior during performances.

Checks for Understanding

- 7.1 Describe a musical selection by using a teacher-created word bank. Discuss the elements of a music selection within teacher-given parameters. Evaluate a performance by using a teacher-provided rubric.
- 7.2 Discuss and create, as a class, guidelines for audience etiquette. Create a rubric for evaluating audience etiquette. Use a created rubric in evaluating audience etiquette.

Student Performance Indicators (SPIs)

The student is able to

- 7.1.1 Discuss a student or professional performance using grade-appropriate music

vocabulary and teacher-given criteria.

7.1.2 Create, with teacher guidance, a rubric for evaluating music performances.

7.1.3 Use student developed rubric to evaluate a music performance.

7.2.1 Demonstrate appropriate audience behavior in a formal performance setting.

7.2.2 Evaluate one's own and other's audience behavior using teacher-given criteria.

7.2.3 Evaluate the effect of audience behavior on a musical performance.

Standard 8.0 Interdisciplinary Connections

Students will understand relationships between music, the other arts, and disciplines outside the arts.

Grade Level Expectations (GLEs)

The student will

8.1 Experience and integrate the elements of music as they relate to other arts disciplines.

8.2 Investigate and compare ways in which music interrelates with other academic disciplines.

Checks for Understanding

8.1 Identify commonalities between music and dance.

Create dramatizations to music selections.

Identify how music and visual art share common themes (e.g., *The Rite of Spring* by Stravinsky and *Three Musicians* by Pablo Picasso) using examples from textbooks or from websites.

8.2 Identify commonalities between music and one other academic discipline.

Student Performance Indicators (SPIs)

The student is able to

8.1.1 Demonstrate commonalities between music and dance and theatre.

8.1.2 Determine and demonstrate ways of combining elements of music, dance and theatre.

8.1.3 Evaluate the relationship of music to other performing arts in a given performance.

8.2.1 Describe the literary characteristics of song lyrics.

8.2.2 Investigate the relationship of music to literature, mathematics, science (e.g., acoustical properties of instrumental music), and/or social studies in teacher-given classroom activities.

8.2.3 Compare music to other selected academic disciplines.

Standard 9.0 Historical and Cultural Relationships

Students will understand music in relation to history and culture.

Grade Level Expectations (GLEs)

The student will

- 9.1 Classify and/or perform music of various cultures and historical periods.

Checks for Understanding

- 9.1 Discuss and demonstrate traditional music of selected cultures (e.g., African, Native American, Asian, Celtic, Latin American).
Discuss and demonstrate an understanding of selected historical periods as related to music studied.

Student Performance Indicators (SPIs)

The student will be able to

- 9.1.1 Discuss characteristics of selected cultures within a musical and/or historical context using teacher-given parameters.
- 9.1.2 Demonstrate an understanding of the music of selected cultures and/or historical periods through performance of music examples (vocal and/or instrumental).
- 9.1.3 Compare and contrast music examples of selected cultures and historical periods.

Appendix B Acceptable In-service activities in Tennessee.

1. In-service activities designed to develop the competencies of apprentice or probationary teachers. (Priority shall be given to these activities. Supervising teachers shall be designated to work with these teachers.)
2. Instructional assessment and improvement studies.
3. Workshops and/or other activities based on the assessed needs of a school or school system.
4. Development and coordination of system and school-wide curriculum.
5. Conducting staff development programs/activities that are consistent with needs identified at the building and/or system level.
6. Studies of: teaching methods and strategies, classroom management, child development, curriculum and instruction, motivation, community involvement, planning, and evaluation.
7. Workshops, seminars, institutes, state-sponsored activities, teacher-center activities, professional organization sponsored activities, and college or university sponsored activities which are related to a teacher's assignment or a school's or system's objectives. (To validate these activities, a written record of attendance/participation must be maintained.)

8. Specific training for instructional assignments.
9. Service as a free consultant to other schools and LEAs, excluding travel time. (Tennessee, n.d. in-service)

Appendix C Music Specialists Ranking of Preferences Towards

Professional Development.

Section Two	Overall		Band		Strings		Choral		General	
Importance of Various Professional Development Opportunities	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean
Discussions with fellow music teachers	1	(4.76)	1	(4.92)	1	(4.75)	1	(4.89)	1	(4.46)
Summer or weekend courses/workshops	2	(4.21)	3.5	(4.17)	3	(4.03)	2	(4.48)	2	(4.25)
State music educators annual in-service conference	3	(4.10)	2	(4.21)	2	(4.14)	3	(4.15)	6	(3.83)
Internet resources	4	(3.97)	6	(3.96)	5	(3.77)	5	(4.08)	3	(4.17)
Professional journals	5	(3.95)	3.5	(4.17)	4	(3.84)	6	(4.00)	4	(3.88)
National in-service conferences	6	(3.73)	5	(4.00)	6	(3.55)	7	(3.62)	5	(3.87)
Discussions with non-music educators	7	(3.70)	7	(3.50)	8	(3.45)	4	(4.12)	7	(3.78)
District-sponsored PD in-service/workshops	8	(3.49)	8	(3.42)	7	(3.52)	8	(3.52)	8	(3.48)

(Bush, 2007, p. 17)

Appendix D Survey

Curriculum Integration Final

Q1.1 Dear Music Teacher,

Do you ever use an integrative approach when teaching music? Whether your answer is yes or no, I'd like to know about it! I am a fellow music teacher with Rutherford County Schools and a doctoral student at Middle Tennessee State University. As part of my doctoral dissertation study, I am surveying to examine the attitudes of music teachers as about curriculum integration on the teaching of music. The purpose of this study is to ascertain if a teacher's attitude towards curriculum integration has an effect on their willingness to integrate core academic subjects (Math, English, Science, and Social Studies) into their Music curriculum. A further purpose is to perceive if the amount of professional development on curriculum integration influences the teacher's attitude towards curriculum integration of core academic subjects into the music curriculum. Participants will answer questions on the definition of curriculum integration, attitudes toward curriculum integration, and questions on professional development along with a demographic information section.

This research will allow the researcher to aid schools in knowing if further professional development into curriculum integration training for music specialists is needed or wanted by music specialists in the state of Tennessee. If you have concerns about a research project, please contact the researcher, **Jonathan Jason Simmons** at **615-812-3056** or **jjs2k@mtmail.mtsu.edu**, or my Faculty Advisor, **Dr.**

Kevin Krahenbuhl at **615-494-7838**, or

Kevin.Krahenbuhl@mtsu.edu. If you have further questions, you may contact the

Office of Compliance by emailing to compliance@mtsu.edu or call **615 898 2400**. **ALL**

COMMUNICATIONS TO THE OFFICE OF COMPLIANCE WILL BE KEPT

STRICTLY CONFIDENTIAL. This study will take about 10 minutes to complete by answering a series of 35 multiple choice questions and one open response question of your choice.

By clicking the page at the end of this page, you are giving your consent to be in the study. No identifiable information such as your name or school has been collected. The potential risks including those that may be minimal or not more than expected in daily life will be experienced. If you choose to participate then change your mind you may withdraw from the study at any point by closing your web browser to exit the survey without any penalty or information being gathered by the researcher. I have read this informed consent document, and the material contained in it has been explained to me. I understand each part of the document, all my questions have been answered, and I freely and voluntarily choose to participate in this study.

☐ Yes (1)

☐ No. Click The Next Button To Exit The Survey (2)

Q2.1 The first set of questions is for you is about defining what curriculum integration is to you. There are no right or wrong answers.

Q2.2 Using music to teach multiplication facts or the order of U. S. presidents.

- ☐ Strongly agree (1)
- ☐ Somewhat agree (2)
- ☐ Somewhat disagree (3)
- ☐ Strongly disagree (4)

Q2.3 Singing a song about earth day and the importance of recycling materials during a science lesson.

- ☐ Strongly agree (1)
- ☐ Somewhat agree (2)
- ☐ Somewhat disagree (3)
- ☐ Strongly disagree (4)

Q2.4 Exploring a blues song to examine its musical elements, its use of irony, and the role of blues in society.

- ☐ Strongly agree (1)
- ☐ Somewhat agree (2)
- ☐ Somewhat disagree (3)
- ☐ Strongly disagree (4)

Q2.5 Comparing the painting, “Mother and Child” by Picasso with the Spanish song “A La Nanita Nana” to examine how the creators used artistic elements to create expressed emotions.

- ☐ Strongly agree (1)
 - ☐ Somewhat agree (2)
 - ☐ Somewhat disagree (3)
 - ☐ Strongly disagree (4)
-

Q2.6 Marching in place and playing rhythm sticks while singing the song “This Land is Your Land.”

- ☐ Strongly agree (1)
- ☐ Somewhat agree (2)
- ☐ Somewhat disagree (3)
- ☐ Strongly disagree (4)

Q2.7 Presenting musical instruments of the Ancient Silk Road in general music while a classroom a teacher simultaneously explores historical/cultural practices of the Silk Road during social studies.

- ☐ Strongly agree (1)
- ☐ Somewhat agree (2)
- ☐ Somewhat disagree (3)
- ☐ Strongly disagree (4)

Q2.8 Playing instruments while singing a song to memorize the order of the planets.

- ☐ Strongly agree (1)
- ☐ Somewhat agree (2)
- ☐ Somewhat disagree (3)
- ☐ Strongly disagree (4)

Q2.9 Examining and comparing the ritual “This Train is Bound for Glory” and the poem “Freedom Train” by Langston Hughes for their cultural and historical significance.

- ☐ Strongly agree (1)
- ☐ Somewhat agree (2)
- ☐ Somewhat disagree (3)
- ☐ Strongly disagree (4)

Q2.10 Playing Copland's "Fanfare for the Common Man" while a classroom a teacher simultaneously explores historical/cultural practices of the home-front during World War

2.

- ☐ Strongly agree (1)
- ☐ Somewhat agree (2)
- ☐ Somewhat disagree (3)
- ☐ Strongly disagree (4)

Q3.1 This section is about your attitude towards your ability to integrate other curriculums outside of music into your subject matter.

Q3.2 I feel it is important for students to experience integrated arts curricula.

- ☐ Strongly agree (1)
- ☐ Somewhat agree (2)
- ☐ Somewhat disagree (3)
- ☐ Strongly disagree (4)

Q3.3 I am confident in my ability to integrate music with other arts subjects such as dance, drama, and visual art.

- ☐ Strongly agree (1)
- ☐ Somewhat agree (2)
- ☐ Somewhat disagree (3)
- ☐ Strongly disagree (4)

Q3.4 I am confident in my ability to integrate music with non-arts subjects, such as language arts, science, math, or history.

- ☐ Strongly agree (1)
- ☐ Somewhat agree (2)
- ☐ Somewhat disagree (3)
- ☐ Strongly disagree (4)

Q3.5 I enjoy helping students make connections across disciplines.

- ☐ Strongly agree (1)
- ☐ Somewhat agree (2)
- ☐ Somewhat disagree (3)
- ☐ Strongly disagree (4)

3.6 I feel it is important for each subject included in an integrated unit to have an equal amount of time for exploration.

- ☐ Strongly agree (1)
- ☐ Somewhat agree (2)
- ☐ Somewhat disagree (3)
- ☐ Strongly disagree (4)

Q3.7 In general, my school is supportive of integrated teaching involving the arts.

- ☐ Strongly agree (1)
- ☐ Somewhat agree (2)
- ☐ Somewhat disagree (3)
- ☐ Strongly disagree (4)

Q3.8 I am free to use integrated teaching strategies as I see fit.

- ☐ Strongly agree (1)
- ☐ Somewhat agree (2)
- ☐ Somewhat disagree (3)
- ☐ Strongly disagree (4)

Q3.9 Teacher collaboration is an important component of teaching integrated lessons.

- ☐ Strongly agree (1)
- ☐ Somewhat agree (2)
- ☐ Somewhat disagree (3)
- ☐ Strongly disagree (4)

Q3.10 Self-directed planning time during the school day is an important component of teaching integrated lessons.

- ☐ Strongly agree (1)
- ☐ Somewhat agree (2)
- ☐ Somewhat disagree (3)
- ☐ Strongly disagree (4)

Q3.11 I feel constrained by curricular integrated teaching.

- ☐ Strongly agree (1)
- ☐ Somewhat agree (2)
- ☐ Somewhat disagree (3)
- ☐ Strongly disagree (4)

Q3.12 I feel that I don't have enough time to incorporate integrated teaching.

- ☐ Strongly agree (1)
- ☐ Somewhat agree (2)
- ☐ Somewhat disagree (3)
- ☐ Strongly disagree (4)

Q4.1 This section is about professional development and support for implementing curriculum integration.

Q4.2 I have had appropriate training related to integrating other subjects into my music teaching.

- ☐ Strongly agree (1)
- ☐ Somewhat agree (2)
- ☐ Somewhat disagree (3)
- ☐ Strongly disagree (4)

Q4.3 I have had in-service professional development training related to integrated music teaching.

- ☐ Strongly agree (1)
- ☐ Somewhat agree (2)
- ☐ Somewhat disagree (3)
- ☐ Strongly disagree (4)

Q4.4 I have taken one or more arts courses on integrating subjects for college credit.

- ☐ Strongly agree (1)
- ☐ Somewhat agree (2)
- ☐ Somewhat disagree (3)
- ☐ Strongly disagree (4)

Q4.5 I have gained helpful information from the professional development courses I have taken.

- ☐ Strongly Agree (1)
- ☐ Somewhat agree (2)
- ☐ Somewhat disagree (3)
- ☐ Strongly disagree (4)

Q4.6 The information presented was built upon connections among disciplines that led me to create new meanings.

- ☐ Strongly agree (1)
- ☐ Somewhat agree (2)
- ☐ Somewhat disagree (3)
- ☐ Strongly disagree (4)

Q4.7 The professional development challenged me to foster my imagination, analytical skills, and reflection in preparation for teaching integrated units.

- ☐ Strongly agree (1)
- ☐ Somewhat agree (2)
- ☐ Somewhat disagree (3)
- ☐ Strongly disagree (4)

Q4.8 The information I received was adaptable to my teaching environment.

- ☐ Strongly agree (1)
- ☐ Somewhat agree (2)
- ☐ Somewhat disagree (3)
- ☐ Strongly disagree (4)

Q4.9 I have conducted professional development sessions related to interdisciplinary music teaching for my colleagues.

- ☐ Strongly agree (1)
- ☐ Somewhat agree (2)
- ☐ Somewhat disagree (3)
- ☐ Strongly disagree (4)

Q5.1 Please chose one of the questions that best fits your view towards curriculum integration of core subjects into your music class.

If you integrate core subjects into your curriculum, please explain your reasons for doing so.

Q5.2 If you do not integrate core subjects into your curriculum, please explain your reasons for not doing so.

Q6.1 This is a demographics section about your background. No identifiable information will be asked.

Q6.2 Please check the box that indicates your years of music teaching experience.

- ☐ 0-5 years (1)
- ☐ 6-10 years (2)
- ☐ 11-15 years (3)
- ☐ 16-20 years (4)
- ☐ 21-25 years (5)
- ☐ 26-30 years (6)
- ☐ More than 30 years (7)

Q6.3 Which area(s) of music do you primarily teach? (Check All That Apply)

- ☐ General Music (1)
- ☐ Choir (2)
- ☐ Band/Orchestra (3)
- ☐ Other (4)

Q6.4 Please check the box that indicates the ethnic majority in your school.

- ☐ African American (1)
- ☐ Asian (2)
- ☐ Hispanic (3)
- ☐ Native American (4)
- ☐ White/Caucasian (5)
- ☐ Other (6)

Q6.5 Which best describes your school?

☐ Private (1)

☐ Public (2)

☐ Public Magnet (3)

☐ Charter School (4)

☐ Other (5)

Q6.6 Please check the box that indicates the second largest ethnic majority in your school.

☐ African American (1)

☐ Asian (2)

☐ Hispanic (3)

☐ Native American (4)

☐ White/Caucasian (5)

☐ Other (6)

Q6.7 Please check the box that indicates the highest degree you have attained.

☐ Bachelor's Degree (1)

☐ Master's Degree (2)

☐ Doctoral Degree (3)

Q6.8 Please check the box that indicates your gender.

☐ Male (1)

☐ Female (2)

Q6.9 Please check the box that indicates your ethnicity.

☐ African American (1)

☐ Asian (2)

☐ Hispanic (3)

☐ Native American (4)

☐ White/Caucasian (5)

☐ Other (6)

Q6.10 Which level of school do you teach? (Check all that apply)

☐

Elementary (1)

☐

Middle School/ Junior High (2)

☐

High School (3)

Q43 A reminder of your rights as a participant: If you have concerns about a research project, please contact the researcher, Jonathan Jason Simmons at 615-812-3056 or jjs2k@mtmail.mtsu.edu, or my Faculty Advisor, Dr. Kevin Krahenbuhl at 615-494-7838, or Kevin.Krahenbuhl@mtsu.edu. If you have further questions, you may contact the Office of Compliance by emailing to compliance@mtsu.edu or call 615 898 2400. ALL COMMUNICATIONS TO THE OFFICE OF COMPLIANCE WILL BE KEPT STRICTLY CONFIDENTIAL.

By clicking the page at the end of this page, you are giving your consent to be in the study. No identifiable information such as your name or school has been collected. The potential risks including those that may be minimal or not more than expected in daily life will be experienced. **I have read this informed consent document, and the material contained in it has been explained to me. I understand**

each part of the document, all my questions have been answered, and I freely and voluntarily choose to participate in this study.

Appendix E Results From School District

Groups Statistics from All Questions Comparing Level of School Taught

Survey Question	School Level Taught	<i>N</i>	<i>M</i>	<i>SD</i>
Q2.2 Using music to teach multiplication facts ...	Elementary	27	2.85	.989
	Middle School/ Junior High	20	2.55	1.099
	High School	23	3.00	.953
	Total	70	2.81	1.011
Q2.3 Singing a song about earth day ...	Elementary	27	2.74	.903
	Middle School/ Junior High	20	3.05	.999
	High School	23	3.30	.926
	Total	70	3.01	.955

Q2.4 Exploring a blues song to examine its musical elements...	Elementary	27	3.89	.320
	Middle School/ Junior High	20	3.65	.489
	High School	23	3.78	.422
	Total	70	3.79	.413
Q2.5 Comparing the painting, “Mother and Child” by Picasso with the Spanish song ...	Elementary	27	3.78	.424
	Middle School/ Junior High	20	3.45	.686
	High School	23	3.74	.449
	Total	70	3.67	.531
Q2.6 Marching in place and playing rhythm sticks while singing the song ...	Elementary	27	2.89	1.219
	Middle School/ Junior High	20	2.50	1.000
	High School	23	3.09	.949
	Total	70	2.84	1.085

Q2.7 Presenting musical instruments of the	Elementary	27	3.78	.424
Ancient Silk Road in general music ...	Middle School/ Junior High	20	3.70	.571
	High School	23	3.70	.635
	Total	70	3.73	.536
Q2.8 Playing instruments while singing a	Elementary	27	2.93	.874
song to memorize the order of the	Middle School/ Junior High	20	2.90	.788
planets	High School	23	3.09	1.041
	Total	70	2.97	.900
Q2.9 Examining and comparing the ritual	Elementary	27	3.85	.362
“This Train is Bound for Glory”	Middle School/ Junior High	20	3.50	.761
	High School	22	3.73	.550
	Total	69	3.71	.571

Q2.10 Playing Copland's "Fanfare for the	Elementary	27	3.56	.698
Common Man" while a classroom ...	Middle School/ Junior High	20	3.20	.834
	High School	23	3.61	.656
	Total	70	3.47	.737
Q3.2 I feel it is important for students to	Elementary	27	3.37	.742
experience integrated arts curricula.	Middle School/ Junior High	20	3.30	.733
	High School	23	3.70	.470
	Total	70	3.46	.674
Q3.3 I am confident in my ability to	Elementary	27	3.26	.764
integrate music with other	Middle School/ Junior High	20	3.15	.988
arts subjects ...	High School	23	3.57	.590
	Total	70	3.33	.793

Q3.4 I am confident in my ability to	Elementary	27	2.96	.940
integrate music with non-arts	Middle School/ Junior High	20	3.20	.894
subjects ...	High School	23	3.39	.783
	Total	70	3.17	.884
Q3.5 I enjoy helping students make	Elementary	27	3.59	.636
connections across disciplines.	Middle School/ Junior High	20	3.40	.681
	High School	23	3.70	.470
	Total	70	3.57	.604
Q3.6 I feel it is important for each subject	Elementary	27	2.67	1.038
included in an integrated unit ...	Middle School/ Junior High	20	2.45	1.099
	High School	23	3.04	.976
	Total	70	2.73	1.048

Q3.7 In general, my school is supportive of integrated teaching involving the arts.	Elementary	27	3.19	.622
	Middle School/ Junior High	20	3.20	.616
	High School	23	3.04	.878
	Total	70	3.14	.708
Q3.8 I am free to use integrated teaching strategies as I see fit.	Elementary	27	3.70	.465
	Middle School/ Junior High	20	3.65	.745
	High School	23	3.74	.449
	Total	70	3.70	.548
Q3.9 Teacher collaboration is an important component of teaching integrated lessons.	Elementary	27	3.56	.641
	Middle School/ Junior High	20	3.70	.571
	High School	23	3.39	.783
	Total	70	3.54	.674

Q3.10 Self-directed planning time	Elementary	27	3.67	.679
during the school day	Middle School/ Junior High	20	3.45	.759
is an important ...	High School	23	3.65	.714
	Total	70	3.60	.710
Q3.11 I feel constrained by	Elementary	27	2.33	.784
curricular integrated teaching.	Middle School/ Junior High	20	1.95	1.099
	High School	23	2.09	.733
	Total	70	2.14	.873
Q3.12 I feel that I don't have enough	Elementary	27	2.89	.801
time to incorporate integrated	Middle School/ Junior High	20	2.60	.940
teaching.	High School	23	2.74	1.054
	Total	70	2.76	.924

Q4.2 I have had appropriate training	Elementary	27	1.81	.834
related to integrating other	Middle School/ Junior High	20	2.15	.988
subjects	High School	23	1.91	.733
	Total	70	1.94	.849
Q4.3 I have had in-service professional	Elementary	27	1.85	.907
development training related to	Middle School/ Junior High	20	2.25	1.020
integrated...	High School	23	2.00	.905
	Total	70	2.01	.940
Q4.4 I have taken one or more arts	Elementary	27	1.48	.893
courses on integrating subjects	Middle School/ Junior High	20	1.35	.813
for college credit.	High School	23	1.35	.714
	Total	70	1.40	.806

Q4.5 I have gained helpful information from the professional development courses ...	Elementary	27	2.52	.975
	Middle School/ Junior High	20	2.60	1.142
	High School	23	2.22	1.085
	Total	70	2.44	1.058
Q4.6 The information presented was built upon connections among disciplines ...	Elementary	27	2.33	.920
	Middle School/ Junior High	20	2.50	1.147
	High School	23	2.26	1.096
	Total	70	2.36	1.036
Q4.7 The professional development challenged me to foster my imagination ...	Elementary	27	2.26	.903
	Middle School/ Junior High	20	2.60	1.188
	High School	23	2.13	1.014
	Total	70	2.31	1.029

Q4.8 The information I received was adaptable to my teaching environment.	Elementary	27	2.59	.797
	Middle School/ Junior High	20	2.80	1.005
	High School	23	2.35	.982
	Total	70	2.57	.926
Q4.9 I have conducted professional development sessions related to	Elementary	27	1.52	.975
	Middle School/ Junior High	20	1.75	1.209
	High School	23	1.61	1.118
	Total	70	1.61	1.081

Groups Statistics from All Questions Comparing Level of School Taught- School District

Survey Question	Subject Taught	<i>N</i>	<i>M</i>	<i>SD</i>
Q2.2 Using music to teach multiplication facts ...	General Music	19	2.95	.911
	Choir	4	2.50	1.732
	Band/Orchestra	15	2.53	.915
	Other	0		
	General Music, Choir	20	2.90	1.071
	General Music, Choir, Other	2	3.50	.707
	General Music, Band/ Orchestra	3	2.33	1.528
	General Music, Band/Orchestra, Other	1	2.00	.
	Band/Orchestra, Other	2	3.50	.707
	Choir, Band/Orchestra, Other	1	3.00	.
	General Music, Choir, Band/Orchestra	2	3.00	1.414
	General Music, Other	1	3.00	.
	Total	70	2.81	1.011

Q2.3 Singing a song about earth day ...	General Music	19	2.95	.911
	Choir	4	3.25	.957
	Band/Orchestra	15	3.20	.676
	Other	0		
	General Music, Choir	20	2.85	1.137
	General Music, Choir, Other	2	3.50	.707
	General Music, Band/ Orchestra	3	2.67	1.528
	General Music, Band/Orchestra, Other	1	2.00	.
	Band/Orchestra, Other	2	4.00	.000
	Choir, Band/Orchestra, Other	1	4.00	.
	General Music, Choir, Band/Orchestra	2	3.00	1.414
	General Music, Other	1	2.00	.
	Total	70	3.01	.955

Q2.4 Exploring a blues song to examine	General Music	19	3.79	.419
its musical elements...	Choir	4	3.50	.577
	Band/Orchestra	15	3.80	.414
	Other	0		
	General Music, Choir	20	3.85	.366
	General Music, Choir, Other	2	4.00	.000
	General Music, Band/ Orchestra	3	3.67	.577
	General Music, Band/Orchestra, Other	1	3.00	.
	Band/Orchestra, Other	2	4.00	.000
	Choir, Band/Orchestra, Other	1	4.00	.
	General Music, Choir, Band/Orchestra	2	3.50	.707
	General Music, Other	1	4.00	.
	Total	70	3.79	.413

Q2.5 Comparing the painting, “Mother and Child” by Picasso with the Spanish song ...	General Music	19	3.79	.419
	Choir	4	3.25	.957
	Band/Orchestra	15	3.73	.458
	Other	0		
	General Music, Choir	20	3.75	.444
	General Music, Choir, Other	2	3.50	.707
	General Music, Band/ Orchestra	3	3.33	1.155
	General Music, Band/Orchestra, Other	1	3.00	.
	Band/Orchestra, Other	2	3.00	.000
	Choir, Band/Orchestra, Other	1	3.00	.
	General Music, Choir, Band/Orchestra	2	4.00	.000
	General Music, Other	1	4.00	.
	Total	70	3.67	.531

Q2.6 Marching in place and playing	General Music	19	3.05	.970
rhythm sticks while	Choir	4	3.25	.957
singing the song ...	Band/Orchestra	15	3.00	1.000
	Other	0		
	General Music, Choir	20	2.55	1.317
	General Music, Choir, Other	2	2.50	2.121
	General Music, Band/ Orchestra	3	2.67	1.155
	General Music, Band/Orchestra, Other	1	3.00	.
	Band/Orchestra, Other	2	2.50	.707
	Choir, Band/Orchestra, Other	1	3.00	.
	General Music, Choir, Band/Orchestra	2	3.00	1.414
	General Music, Other	1	2.00	.
	Total	70	2.84	1.085

Q2.7 Presenting musical instruments of	General Music	19	3.79	.419
the Ancient Silk Road	Choir	4	3.75	.500
in general music ...	Band/Orchestra	15	3.80	.561
	Other	0		
	General Music, Choir	20	3.75	.444
	General Music, Choir, Other	2	4.00	.000
	General Music, Band/ Orchestra	3	3.33	1.155
	General Music, Band/Orchestra, Other	1	3.00	.
	Band/Orchestra, Other	2	4.00	.000
	Choir, Band/Orchestra, Other	1	4.00	.
	General Music, Choir, Band/Orchestra	2	3.50	.707
	General Music, Other	1	2.00	.
	Total	70	3.73	.536

Q2.8 Playing instruments while singing a	General Music	19	3.00	.816
song to memorize the	Choir	4	2.75	1.258
order of the planets	Band/Orchestra	15	3.20	.862
	Other	0		
	General Music, Choir	20	2.80	1.056
	General Music, Choir, Other	2	3.00	.000
	General Music, Band/ Orchestra	3	2.33	.577
	General Music, Band/Orchestra, Other	1	3.00	.
	Band/Orchestra, Other	2	4.00	.000
	Choir, Band/Orchestra, Other	1	3.00	.
	General Music, Choir, Band/Orchestra	2	3.00	1.414
	General Music, Other	1	3.00	.
	Total	70	2.97	.900

Q2.9 Examining and comparing the	General Music	19	3.72	.575
ritual “This Train is	Choir	4	3.75	.500
Bound for Glory”	Band/Orchestra	15	3.73	.458
	Other	0		
	General Music, Choir	20	3.75	.639
	General Music, Choir, Other	2	4.00	.000
	General Music, Band/ Orchestra	3	3.33	1.155
	General Music, Band/Orchestra, Other	1	3.00	.
	Band/Orchestra, Other	2	4.00	.000
	Choir, Band/Orchestra, Other	1	4.00	.
	General Music, Choir, Band/Orchestra	2	3.50	.707
	General Music, Other	1	3.00	.
	Total	70	3.71	.571

Q2.10 Playing Copland's "Fanfare for the	General Music	19	3.58	.607
Common Man" while a	Choir	4	3.00	1.155
classroom ...	Band/Orchestra	15	3.33	.900
	Other	0		
	General Music, Choir	20	3.55	.759
	General Music, Choir, Other	2	3.50	.707
	General Music, Band/ Orchestra	3	3.67	.577
	General Music, Band/Orchestra, Other	1	3.00	.
	Band/Orchestra, Other	2	4.00	.000
	Choir, Band/Orchestra, Other	1	3.00	.
	General Music, Choir, Band/Orchestra	2	3.50	.707
	General Music, Other	1	3.00	.
	Total	70	3.47	.737

Q3.2 I feel it is important for students to experience integrated arts curricula.	General Music	19	3.53	.513
	Choir	4	3.25	.500
	Band/Orchestra	15	3.60	.632
	Other	0		
	General Music, Choir	20	3.45	.826
	General Music, Choir, Other	2	3.50	.707
	General Music, Band/ Orchestra	3	3.00	.000
	General Music, Band/Orchestra, Other	1	2.00	.
	Band/Orchestra, Other	2	4.00	.000
	Choir, Band/Orchestra, Other	1	3.00	.
	General Music, Choir, Band/Orchestra	2	3.00	1.414
	General Music, Other	1	4.00	.
	Total	70	3.46	.674

Q3.3 I am confident in my ability to	General Music	19	3.47	.612
integrate music with other arts	Choir	4	3.50	1.000
subjects ...	Band/Orchestra	15	3.40	.737
	Other	0		
	General Music, Choir	20	3.20	.894
	General Music, Choir, Other	2	3.50	.707
	General Music, Band/ Orchestra	3	3.33	.577
	General Music, Band/Orchestra, Other	1	1.00	.
	Band/Orchestra, Other	2	4.00	.000
	Choir, Band/Orchestra, Other	1	4.00	.
	General Music, Choir, Band/Orchestra	2	2.50	.707
	General Music, Other	1	3.00	.
	Total	70	3.33	.793

Q3.4 I am confident in my ability to	General Music	19	3.00	.943
integrate music with non-arts	Choir	4	3.00	1.155
subjects ...	Band/Orchestra	15	3.47	.743
	Other	0		
	General Music, Choir	20	3.10	1.021
	General Music, Choir, Other	2	3.50	.707
	General Music, Band/ Orchestra	3	3.33	.577
	General Music, Band/Orchestra, Other	1	2.00	.
	Band/Orchestra, Other	2	4.00	.000
	Choir, Band/Orchestra, Other	1	3.00	.
	General Music, Choir, Band/Orchestra	2	3.00	.000
	General Music, Other	1	3.00	.
	Total	70	3.17	.884

Q3.5 I enjoy helping students make connections across disciplines.	General Music	19	3.58	.607
	Choir	4	3.25	.957
	Band/Orchestra	15	3.53	.640
	Other	0		
	General Music, Choir	20	3.65	.587
	General Music, Choir, Other	2	4.00	.000
	General Music, Band/ Orchestra	3	3.33	.577
	General Music, Band/Orchestra, Other	1	3.00	.
	Band/Orchestra, Other	2	4.00	.000
	Choir, Band/Orchestra, Other	1	4.00	.
	General Music, Choir, Band/Orchestra	2	3.50	.707
	General Music, Other	1	3.00	.
	Total	70	3.57	.604

Q3.6 I feel it is important for each subject	General Music	19	2.53	1.172
included in an integrated unit ...	Choir	4	2.50	1.291
	Band/Orchestra	15	2.60	1.056
	Other	0		
	General Music, Choir	20	3.00	.973
	General Music, Choir, Other	2	3.50	.707
	General Music, Band/ Orchestra	3	2.67	.577
	General Music, Band/Orchestra, Other	1	2.00	.
	Band/Orchestra, Other	2	2.50	2.121
	Choir, Band/Orchestra, Other	1	4.00	.
	General Music, Choir, Band/Orchestra	2	2.50	.707
	General Music, Other	1	3.00	.
	Total	70	2.73	1.048

Q3.7 In general, my school is supportive of integrated teaching involving the arts.	General Music	70	2.73	1.048
	Choir	19	2.95	.848
	Band/Orchestra	4	3.25	.500
	Other	0		
	General Music, Choir	20	3.35	.587
	General Music, Choir, Other	2	3.50	.707
	General Music, Band/ Orchestra	3	3.00	.000
	General Music, Band/Orchestra, Other	1	3.00	.
	Band/Orchestra, Other	2	4.00	.000
	Choir, Band/Orchestra, Other	1	4.00	.
	General Music, Choir, Band/Orchestra	2	3.00	.000
	General Music, Other	1	2.00	.
	Total	70	3.14	.708

Q3.8 I am free to use integrated teaching strategies as I see fit.	General Music	19	3.63	.496
	Choir	4	4.00	.000
	Band/Orchestra	15	3.87	.352
	Other	0		
	General Music, Choir	20	3.70	.470
	General Music, Choir, Other	2	4.00	.000
	General Music, Band/ Orchestra	3	3.67	.577
	General Music, Band/Orchestra, Other	1	1.00	.
	Band/Orchestra, Other	2	3.50	.707
	Choir, Band/Orchestra, Other	1	4.00	.
	General Music, Choir, Band/Orchestra	2	4.00	.000
	General Music, Other	1	3.00	.
	Total	70	3.70	.548

Q3.9 Teacher collaboration is an important component of teaching integrated lessons.	General Music	19	3.37	.895
	Choir	4	3.75	.500
	Band/Orchestra	15	3.53	.516
	Other	0		
	General Music, Choir	20	3.65	.587
	General Music, Choir, Other	2	4.00	.000
	General Music, Band/ Orchestra	3	3.33	.577
	General Music, Band/Orchestra, Other	1	2.00	.
	Band/Orchestra, Other	2	4.00	.000
	Choir, Band/Orchestra, Other	1	4.00	.
	General Music, Choir, Band/Orchestra	2	4.00	.000
	General Music, Other	1	3.00	.
	Total	70	3.54	.674

Q3.10 Self-directed planning time during the school day is an important component ...	General Music	19	3.63	.761
	Choir	4	3.50	1.000
	Band/Orchestra	15	3.60	.737
	Other	0		
	General Music, Choir	20	3.65	.671
	General Music, Choir, Other	2	3.00	.000
	General Music, Band/ Orchestra	3	3.33	.577
	General Music, Band/Orchestra, Other	1	2.00	.
	Band/Orchestra, Other	2	4.00	.000
	Choir, Band/Orchestra, Other	1	4.00	.
	General Music, Choir, Band/Orchestra	2	4.00	.000
	General Music, Other	1	4.00	.
	Total	70	3.60	.710

Q3.11 I feel constrained by curricular integrated teaching.	General Music	19	2.53	.697
	Choir	4	1.75	.957
	Band/Orchestra	15	2.13	1.060
	Other	0		
	General Music, Choir	20	1.85	.671
	General Music, Choir, Other	2	1.50	.707
	General Music, Band/ Orchestra	3	2.00	.000
	General Music, Band/Orchestra, Other	1	4.00	.
	Band/Orchestra, Other	2	1.00	.000
	Choir, Band/Orchestra, Other	1	2.00	.
	General Music, Choir, Band/Orchestra	2	3.00	1.414
	General Music, Other	1	3.00	.
	Total	70	2.14	.873

Q3.12 I feel that I don't have enough time to incorporate integrated teaching.	General Music	70	2.14	.873
	Choir	19	3.00	.943
	Band/Orchestra	4	3.00	.816
	Other	0		
	General Music, Choir	20	2.85	.671
	General Music, Choir, Other	2	1.50	.707
	General Music, Band/ Orchestra	3	1.67	1.155
	General Music, Band/Orchestra, Other	1	3.00	.
	Band/Orchestra, Other	2	1.00	.000
	Choir, Band/Orchestra, Other	1	2.00	.
	General Music, Choir, Band/Orchestra	2	3.00	1.414
	General Music, Other	1	3.00	.
	Total	70	2.76	.924

Q4.2 I have had appropriate training related to integrating other subjects	General Music	19	1.79	.855
	Choir	4	1.75	.957
	Band/Orchestra	15	1.87	.743
	Other	0		
	General Music, Choir	20	1.95	.826
	General Music, Choir, Other	2	3.00	1.414
	General Music, Band/ Orchestra	3	3.00	.000
	General Music, Band/Orchestra, Other	1	1.00	.
	Band/Orchestra, Other	2	2.50	.707
	Choir, Band/Orchestra, Other	1	3.00	.
	General Music, Choir, Band/Orchestra	2	1.00	.000
	General Music, Other	1	2.00	.
	Total	70	1.94	.849

Q4.3 I have had in-service professional	General Music	19	1.95	.970
development training related to integrated...	Choir	4	1.25	.500
	Band/Orchestra	15	2.07	.961
	Other	0		
	General Music, Choir	20	1.90	.852
	General Music, Choir, Other	2	2.50	.707
	General Music, Band/ Orchestra	3	3.33	.577
	General Music, Band/Orchestra, Other	1	2.00	.
	Band/Orchestra, Other	2	3.00	1.414
	Choir, Band/Orchestra, Other	1	3.00	.
	General Music, Choir, Band/Orchestra	2	1.00	.000
	General Music, Other	1	2.00	.
	Total	70	2.01	.940

Q4.4 I have taken one or more arts courses on integrating subjects for college credit.	General Music	19	1.47	.964
	Choir	4	1.00	.000
	Band/Orchestra	15	1.13	.352
	Other	0		
	General Music, Choir	20	1.65	1.040
	General Music, Choir, Other	2	1.50	.707
	General Music, Band/ Orchestra	3	1.67	.577
	General Music, Band/Orchestra, Other	1	1.00	.
	Band/Orchestra, Other	2	1.50	.707
	Choir, Band/Orchestra, Other	1	1.00	.
	General Music, Choir, Band/Orchestra	2	1.00	.000
	General Music, Other	1	1.00	.
	Total	70	1.40	.806

Q4.5 I have gained helpful information from the professional development courses ...	General Music	19	2.53	.905
	Choir	4	1.00	.000
	Band/Orchestra	15	2.13	.990
	Other	0		
	General Music, Choir	20	2.80	1.105
	General Music, Choir, Other	2	3.50	.707
	General Music, Band/ Orchestra	3	3.00	.000
	General Music, Band/Orchestra, Other	1	2.00	.
	Band/Orchestra, Other	2	3.50	.707
	Choir, Band/Orchestra, Other	1	3.00	.
	General Music, Choir, Band/Orchestra	2	1.00	.000
	General Music, Other	1	1.00	.
	Total	70	2.44	1.058

Q4.6 The information presented was built upon	General Music	19	2.26	.872
connections among disciplines ...	Choir	4	1.00	.000
	Band/Orchestra	15	2.20	1.082
	Other	0		
	General Music, Choir	20	2.70	.979
	General Music, Choir, Other	2	3.50	.707
	General Music, Band/ Orchestra	3	3.00	1.000
	General Music, Band/Orchestra, Other	1	2.00	.
	Band/Orchestra, Other	2	3.50	.707
	Choir, Band/Orchestra, Other	1	3.00	.
	General Music, Choir, Band/Orchestra	2	1.00	.000
	General Music, Other	1	1.00	.
	Total	70	2.36	1.036

Q4.7 The professional development challenged m	General Music	19	2.26	.991
me to foster my imagination ...	Choir	4	1.00	.000
	Band/Orchestra	15	2.33	.976
	Other	0		
	General Music, Choir	20	2.55	1.050
	General Music, Choir, Other	2	3.00	1.414
	General Music, Band/ Orchestra	3	2.67	.577
	General Music, Band/Orchestra, Other	1	2.00	.
	Band/Orchestra, Other	2	3.50	.707
	Choir, Band/Orchestra, Other	1	3.00	.
	General Music, Choir, Band/Orchestra	2	1.00	.000
	General Music, Other	1	1.00	.
	Total	70	2.31	1.029

Q4.8 The information I received was adaptable to my teaching environment.	General Music	19	2.53	.697
	Choir	4	1.50	1.000
	Band/Orchestra	15	2.47	.915
	Other	0		
	General Music, Choir	20	2.90	.968
	General Music, Choir, Other	2	3.50	.707
	General Music, Band/ Orchestra	3	2.67	.577
	General Music, Band/Orchestra, Other	1	2.00	.
	Band/Orchestra, Other	2	3.50	.707
	Choir, Band/Orchestra, Other	1	3.00	.
	General Music, Choir, Band/Orchestra	2	1.00	.000
	General Music, Other	1	2.00	.
	Total	70	2.57	.926

Q4.9 I have conducted professional development	General Music	19	1.58	1.071
sessions related to interdisciplinary ...	Choir	4	1.75	1.500
	Band/Orchestra	15	1.47	1.060
	Other	0		
	General Music, Choir	20	1.55	1.050
	General Music, Choir, Other	2	1.50	.707
	General Music, Band/ Orchestra	3	2.33	.577
	General Music, Band/Orchestra, Other	1	1.00	.
	Band/Orchestra, Other	2	2.50	2.121
	Choir, Band/Orchestra, Other	1	4.00	.
	General Music, Choir, Band/Orchestra	2	1.00	.000
	General Music, Other	1	1.00	.
	Total	70	1.61	1.081

Groups Statistics from All Questions Comparing Gender School District

Survey Question	School Level Taught	N	Mean	SD
Q2.2 Using music to teach multiplication facts ...	Male	28	2.75	1.005
	Female	42	2.86	1.026
	Total	70	2.81	1.011
Q2.3 Singing a song about earth day ...	Male	28	3.04	1.036
	Female	42	3.00	.911
	Total	70	3.01	.955
Q2.4 Exploring a blues song to examine its musical elements...	Male	28	3.68	.476
	Female	42	3.86	.354
	Total	70	3.79	.413

Q2.5 Comparing the painting, “Mother and Child”	Male	28	3.54	.576
by Picasso with the Spanish song ...	Female	42	3.76	.484
	Total	70	3.67	.531
Q2.6 Marching in place and playing rhythm sticks	Male	28	2.71	.937
while singing the song ...	Female	42	2.93	1.177
	Total	70	2.84	1.085
Q2.7 Presenting musical instruments of the	Male	28	3.57	.690
Ancient Silk Road in general music ...	Female	42	3.83	.377
	Total	70	3.73	.536
Q2.8 Playing instruments while singing a song to	Male	28	2.89	.994
memorize the order of the planets	Female	42	3.02	.841
	Total	70	2.97	.900

Q2.9 Examining and comparing the ritual “This	Male	28	3.57	.690
Train is Bound for Glory”	Female	42	3.80	.459
	Total	70	3.71	.571
Q2.10 Playing Copland's "Fanfare for the	Male	28	3.46	.693
Common Man" while a classroom ...	Female	42	3.48	.773
	Total	70	3.47	.737
Q3.2 I feel it is important for students to	Male	28	3.43	.690
experience integrated arts curricula.	Female	42	3.48	.671
	Total	70	3.46	.674
Q3.3 I am confident in my ability to integrate	Male	28	3.21	.833
music with other arts subjects ...	Female	42	3.40	.767
	Total	70	3.33	.793

Q3.4 I am confident in my ability to integrate	Male	28	3.18	.772
music with non-arts subjects ...	Female	42	3.17	.961
	Total	70	3.17	.884
Q3.5 I enjoy helping students make connections	Male	28	3.57	.504
across disciplines.	Female	42	3.57	.668
	Total	70	3.57	.604
Q3.6 I feel it is important for each subject	Male	28	2.71	1.049
included in an integrated unit ...	Female	42	2.74	1.061
	Total	70	2.73	1.048
Q3.7 In general, my school is supportive of	Male	28	3.11	.786
integrated teaching involving the arts.	Female	42	3.17	.660
	Total	70	3.14	.708

Q3.8 I am free to use integrated teaching strategies as I see fit.	Male	28	3.61	.685
	Female	42	3.76	.431
	Total	70	3.70	.548
Q3.9 Teacher collaboration is an important component of teaching integrated lessons.	Male	28	3.64	.621
	Female	42	3.48	.707
	Total	70	3.54	.674
Q3.10 Self-directed planning time during the school day is an important component ...	Male	28	3.39	.832
	Female	42	3.74	.587
	Total	70	3.60	.710
Q3.11 I feel constrained by curricular integrated teaching.	Male	28	2.07	.900
	Female	42	2.19	.862
	Total	70	2.14	.873

Q3.12 I feel that I don't have enough time to incorporate integrated teaching.	Male	28	2.36	.951
	Female	42	3.02	.811
	Total	70	2.76	.924
Q4.2 I have had appropriate training related to integrating other subjects	Male	28	2.14	.848
	Female	42	1.81	.833
	Total	70	1.94	.849
Q4.3 I have had in-service professional development training related to integrated ...	Male	28	2.25	1.005
	Female	42	1.86	.872
	Total	70	2.01	.940
Q4.4 I have taken one or more arts courses on integrating subjects for college credit.	Male	28	1.39	.832
	Female	42	1.40	.798
	Total	70	1.40	.806

Q4.5 I have gained helpful information from the professional development courses ...	Male	28	2.50	1.072
	Female	42	2.40	1.061
	Total	70	2.44	1.058
Q4.6 The information presented was built upon connections among disciplines ...	Male	28	2.50	1.072
	Female	42	2.26	1.014
	Total	70	2.36	1.036
Q4.7 The professional development challenged me to foster my imagination ...	Male	28	2.39	.994
	Female	42	2.26	1.061
	Total	70	2.31	1.029
Q4.8 The information I received was adaptable to my teaching environment.	Male	28	2.64	.911
	Female	42	2.52	.943
	Total	70	2.57	.926

Q4.9 I have conducted professional development	Male	28	1.54	1.071
sessions related to interdisciplinary ...	Female	42	1.67	1.097
	Total	70	1.61	1.081

Years Taught Means All Questions School District

Survey Question	Subject Taught	<i>N</i>	<i>M</i>	<i>SD</i>
Q2.2 Using music to teach multiplication facts ...	0-5 Years of Experience	15	2.73	1.280
	6-10 Years of Experience	7	3.29	.756
	11-15 Years of Experience	16	2.75	.775
	16-20 Years of Experience	8	2.63	.916
	21-25 Years of Experience	10	2.60	1.265
	26-30 Years of Experience	6	2.67	1.033
	More than 30 Years of Experience	8	3.25	.886
	Total	70	2.81	1.011

Q2.3 Singing a song about earth day ...	0-5 Years of Experience	15	2.87	.990
	6-10 Years of Experience	7	2.71	.756
	11-15 Years of Experience	16	3.25	.775
	16-20 Years of Experience	8	2.88	.835
	21-25 Years of Experience	10	3.10	1.287
	26-30 Years of Experience	6	3.17	1.169
	More than 30 Years of Experience	8	3.00	1.069
	Total	70	3.01	.955

Q2.4 Exploring a blues song to examine its musical elements...	0-5 Years of Experience	15	3.87	.352
	6-10 Years of Experience	7	3.71	.488
	11-15 Years of Experience	16	3.69	.479
	16-20 Years of Experience	8	3.75	.463
	21-25 Years of Experience	10	3.80	.422
	26-30 Years of Experience	6	3.83	.408
	More than 30 Years of Experience	8	3.88	.354
	Total	70	3.79	.413

Q2.5 Comparing the painting, “Mother and Child” by Picasso with the Spanish ...	0-5 Years of Experience	15	3.67	.488
	6-10 Years of Experience	7	4.00	.000
	11-15 Years of Experience	16	3.56	.512
	16-20 Years of Experience	8	3.75	.463
	21-25 Years of Experience	10	3.60	.699
	26-30 Years of Experience	6	3.33	.816
	More than 30 Years of Experience	8	3.88	.354
	Total	70	3.67	.531

Q2.6 Marching in place and playing rhythm	0-5 Years of Experience	15	3.53	.915
sticks while singing the song ...	6-10 Years of Experience	7	2.71	.951
	11-15 Years of Experience	16	2.25	1.183
	16-20 Years of Experience	8	3.13	.991
	21-25 Years of Experience	10	2.40	.966
	26-30 Years of Experience	6	3.00	.894
	More than 30 Years of Experience	8	3.00	1.069
	Total	70	2.84	1.085

Q2.7 Presenting musical instruments of the	0-5 Years of Experience	15	3.67	.488
Ancient Silk Road in general music ...	6-10 Years of Experience	7	4.00	.000
	11-15 Years of Experience	16	3.88	.342
	16-20 Years of Experience	8	3.75	.463
	21-25 Years of Experience	10	3.70	.483
	26-30 Years of Experience	6	3.67	.816
	More than 30 Years of Experience	8	3.38	.916
	Total	70	3.73	.536

Q2.8 Playing instruments while singing a song to memorize the order of the planets	0-5 Years of Experience	15	3.00	1.069
	6-10 Years of Experience	7	2.57	.535
	11-15 Years of Experience	16	3.19	.655
	16-20 Years of Experience	8	2.75	1.165
	21-25 Years of Experience	10	2.70	1.059
	26-30 Years of Experience	6	3.17	.753
	More than 30 Years of Experience	8	3.25	.886
	Total	70	2.97	.900

Q2.9 Examining and comparing the ritual	0-5 Years of Experience	15	3.67	.617
“This Train is Bound for Glory”	6-10 Years of Experience	7	4.00	.000
	11-15 Years of Experience	16	3.75	.577
	16-20 Years of Experience	8	3.63	.744
	21-25 Years of Experience	10	3.70	.483
	26-30 Years of Experience	6	3.60	.894
	More than 30 Years of Experience	8	3.63	.518
	Total	70	3.71	.571

Q2.10 Playing Copland's "Fanfare for the Common Man" while a classroom ...	0-5 Years of Experience	15	3.27	.961
	6-10 Years of Experience	7	3.57	.787
	11-15 Years of Experience	16	3.50	.816
	16-20 Years of Experience	8	3.50	.756
	21-25 Years of Experience	10	3.50	.527
	26-30 Years of Experience	6	3.50	.548
	More than 30 Years of Experience	8	3.63	.518
	Total	70	3.47	.737

Q3.2 I feel it is important for students to experience integrated arts curricula.	0-5 Years of Experience	15	3.33	.900
	6-10 Years of Experience	7	3.57	.535
	11-15 Years of Experience	16	3.56	.512
	16-20 Years of Experience	8	3.63	.518
	21-25 Years of Experience	10	3.20	.789
	26-30 Years of Experience	6	3.33	.516
	More than 30 Years of Experience	8	3.63	.744
	Total	70	3.46	.674

Q3.3 I am confident in my ability to	0-5 Years of Experience	15	2.93	.961
integrate music with other arts ...	6-10 Years of Experience	7	3.57	.535
	11-15 Years of Experience	16	3.44	.727
	16-20 Years of Experience	8	3.13	.641
	21-25 Years of Experience	10	3.60	.966
	26-30 Years of Experience	6	3.50	.548
	More than 30 Years of Experience	8	3.38	.744
	Total	70	3.33	.793

Q3.4 I am confident in my ability to integrate music with non-arts ...	0-5 Years of Experience	15	2.73	.884
	6-10 Years of Experience	7	2.86	.900
	11-15 Years of Experience	16	3.31	1.078
	16-20 Years of Experience	8	3.00	.756
	21-25 Years of Experience	10	3.50	.850
	26-30 Years of Experience	6	3.33	.516
	More than 30 Years of Experience	8	3.63	.518
	Total	70	3.17	.884

Q3.5 I enjoy helping students make connections across disciplines.	0-5 Years of Experience	15	3.47	.834
	6-10 Years of Experience	7	3.71	.488
	11-15 Years of Experience	16	3.38	.619
	16-20 Years of Experience	8	3.88	.354
	21-25 Years of Experience	10	3.60	.516
	26-30 Years of Experience	6	3.67	.516
	More than 30 Years of Experience	8	3.63	.518
	Total	70	3.57	.604

Q3.6 I feel it is important for each subject included in an integrated unit ...	0-5 Years of Experience	15	2.47	1.187
	6-10 Years of Experience	7	2.57	.976
	11-15 Years of Experience	16	2.44	1.094
	16-20 Years of Experience	8	3.25	.707
	21-25 Years of Experience	10	2.40	1.075
	26-30 Years of Experience	6	3.33	.816
	More than 30 Years of Experience	8	3.38	.744
	Total	70	2.73	1.048

Q3.7 In general, my school is supportive of integrated teaching involving the arts.	0-5 Years of Experience	15	3.20	.414
	6-10 Years of Experience	7	3.29	.756
	11-15 Years of Experience	16	2.94	.854
	16-20 Years of Experience	8	3.38	.744
	21-25 Years of Experience	10	3.00	.816
	26-30 Years of Experience	6	3.67	.516
	More than 30 Years of Experience	8	2.88	.641
	Total	70	3.14	.708

Q3.8 I am free to use integrated teaching strategies as I see fit.	0-5 Years of Experience	15	3.80	.414
	6-10 Years of Experience	7	3.57	.535
	11-15 Years of Experience	16	3.56	.512
	16-20 Years of Experience	8	3.88	.354
	21-25 Years of Experience	10	3.50	.972
	26-30 Years of Experience	6	4.00	.000
	More than 30 Years of Experience	8	3.75	.463
	Total	70	3.70	.548

Q3.9 Teacher collaboration is an important component of teaching integrated ...	0-5 Years of Experience	15	3.73	.458
	6-10 Years of Experience	7	3.71	.488
	11-15 Years of Experience	16	3.38	.806
	16-20 Years of Experience	8	3.88	.354
	21-25 Years of Experience	10	3.20	1.033
	26-30 Years of Experience	6	3.83	.408
	More than 30 Years of Experience	8	3.25	.463
	Total	70	3.54	.674

Q3.10 Self-directed planning time during the school day is an important ...	0-5 Years of Experience	15	3.73	.704
	6-10 Years of Experience	7	3.43	.976
	11-15 Years of Experience	16	3.38	.885
	16-20 Years of Experience	8	3.63	.518
	21-25 Years of Experience	10	3.40	.699
	26-30 Years of Experience	6	3.83	.408
	More than 30 Years of Experience	8	4.00	.000
	Total	70	3.60	.710

Q3.11 I feel constrained by curricular integrated teaching.	0-5 Years of Experience	15	1.87	.743
	6-10 Years of Experience	7	2.43	.976
	11-15 Years of Experience	16	2.13	1.147
	16-20 Years of Experience	8	1.75	.707
	21-25 Years of Experience	10	2.40	.843
	26-30 Years of Experience	6	2.17	.408
	More than 30 Years of Experience	8	2.50	.756
	Total	70	2.14	.873

Q3.12 I feel that I don't have enough time to incorporate integrated teaching.	0-5 Years of Experience	15	2.80	.862
	6-10 Years of Experience	7	3.14	.900
	11-15 Years of Experience	16	2.56	1.153
	16-20 Years of Experience	8	2.50	.535
	21-25 Years of Experience	10	2.60	.843
	26-30 Years of Experience	6	2.33	1.033
	More than 30 Years of Experience	8	3.50	.535
	Total	70	2.76	.924

Q4.2 I have had appropriate training	0-5 Years of Experience	15	1.47	.516
related to integrating other	6-10 Years of Experience	7	1.57	.535
	11-15 Years of Experience	16	2.44	.964
	16-20 Years of Experience	8	1.88	.641
	21-25 Years of Experience	10	1.90	.994
	26-30 Years of Experience	6	3.00	.000
	More than 30 Years of Experience	8	1.50	.535
	Total	70	1.94	.849

Q4.3 I have had in-service professional development training related ...	0-5 Years of Experience	15	1.67	.900
	6-10 Years of Experience	7	2.00	.816
	11-15 Years of Experience	16	2.44	1.031
	16-20 Years of Experience	8	1.75	.707
	21-25 Years of Experience	10	1.90	1.101
	26-30 Years of Experience	6	3.00	.000
	More than 30 Years of Experience	8	1.50	.535
	Total	70	2.01	.940

Q4.4 I have taken one or more arts courses	0-5 Years of Experience	15	1.33	.488
on integrating subjects ...	6-10 Years of Experience	7	1.43	1.134
	11-15 Years of Experience	16	1.31	.602
	16-20 Years of Experience	8	1.75	1.165
	21-25 Years of Experience	10	1.30	.949
	26-30 Years of Experience	6	1.83	1.169
	More than 30 Years of Experience	8	1.13	.354
	Total	70	1.40	.806

Q4.5 I have gained helpful information	0-5 Years of Experience	15	2.27	.961
from the professional development ...	6-10 Years of Experience	7	2.43	1.134
	11-15 Years of Experience	16	3.13	.885
	16-20 Years of Experience	8	2.38	1.188
	21-25 Years of Experience	10	2.20	.919
	26-30 Years of Experience	6	3.17	.408
	More than 30 Years of Experience	8	1.25	.707
	Total	70	2.44	1.058

Q4.6 The information presented was built upon connections among disciplines ...	0-5 Years of Experience	15	2.00	.756
	6-10 Years of Experience	7	2.00	1.155
	11-15 Years of Experience	16	3.13	.885
	16-20 Years of Experience	8	2.25	.886
	21-25 Years of Experience	10	2.20	1.033
	26-30 Years of Experience	6	3.17	.753
	More than 30 Years of Experience	8	1.50	.926
	Total	70	2.36	1.036

Q4.7 The professional development challenged me to foster my ...	0-5 Years of Experience	15	2.00	.926
	6-10 Years of Experience	7	2.14	1.069
	11-15 Years of Experience	16	2.94	.998
	16-20 Years of Experience	8	2.63	.916
	21-25 Years of Experience	10	2.00	.943
	26-30 Years of Experience	6	3.00	.632
	More than 30 Years of Experience	8	1.38	.744
	Total	70	2.31	1.029

Q4.8 The information I received was adaptable to my teaching ...	0-5 Years of Experience	15	2.40	.737
	6-10 Years of Experience	7	2.86	1.069
	11-15 Years of Experience	16	2.94	.998
	16-20 Years of Experience	8	2.75	.886
	21-25 Years of Experience	10	2.40	.843
	26-30 Years of Experience	6	3.00	.632
	More than 30 Years of Experience	8	1.63	.744
	Total	70	2.57	.926

Q4.9 I have conducted professional development sessions related to ...	0-5 Years of Experience	15	1.67	1.234
	6-10 Years of Experience	7	1.00	.000
	11-15 Years of Experience	16	1.88	1.310
	16-20 Years of Experience	8	1.88	.991
	21-25 Years of Experience	10	1.10	.316
	26-30 Years of Experience	6	2.83	1.169
	More than 30 Years of Experience	8	1.00	.000
	Total	70	1.61	1.081

Groups Statistics from All Questions Comparing Degree Earned School District

Survey Question	School Level Taught	<i>N</i>	<i>M</i>	<i>SD</i>
Q2.2 Using music to teach multiplication facts ...	Bachelor's Degree	30	2.73	1.081
	Master's Degree	37	2.95	.941
	Doctoral Degree	3	2.00	1.000
	Total	70	2.81	1.011
Q2.3 Singing a song about earth day ...	Bachelor's Degree	30	2.77	1.073
	Master's Degree	37	3.22	.821
	Doctoral Degree	3	3.00	1.000
	Total	70	3.01	.955
Q2.4 Exploring a blues song to examine its musical elements...	Bachelor's Degree	30	3.70	.466
	Master's Degree	37	3.86	.347
	Doctoral Degree	3	3.67	.577

	Total	70	3.79	.413
Q2.5 Comparing the painting, “Mother and Child”	Bachelor’s Degree	30	3.63	.556
by Picasso with the Spanish song ...	Master’s Degree	37	3.68	.530
	Doctoral Degree	3	4.00	.000
	Total	70	3.67	.531
Q2.6 Marching in place and playing rhythm sticks	Bachelor’s Degree	30	2.77	1.135
while singing the song ...	Master’s Degree	37	2.86	1.084
	Doctoral Degree	3	3.33	.577
	Total	70	2.84	1.085
Q2.7 Presenting musical instruments of the	Bachelor’s Degree	30	3.73	.521
Ancient Silk Road in general music ...	Master’s Degree	37	3.73	.560
	Doctoral Degree	3	3.67	.577
	Total	70	3.73	.536

Q2.8 Playing instruments while singing a song to memorize the order of the planets	Bachelor's Degree	30	2.93	1.015
	Master's Degree	37	3.05	.780
	Doctoral Degree	3	2.33	1.155
	Total	70	2.97	.900
Q2.9 Examining and comparing the ritual "This Train is Bound for Glory"	Bachelor's Degree	30	3.67	.661
	Master's Degree	36	3.75	.500
	Doctoral Degree	3	3.67	.577
	Total	69	3.71	.571
Q2.10 Playing Copland's "Fanfare for the Common Man" while a classroom ...	Bachelor's Degree	30	3.67	.606
	Master's Degree	37	3.35	.789
	Doctoral Degree	3	3.00	1.000
	Total	70	3.47	.737

Q3.2 I feel it is important for students to experience integrated arts curricula.	Bachelor's Degree	30	3.37	.809
	Master's Degree	37	3.54	.558
	Doctoral Degree	3	3.33	.577
	Total	70	3.46	.674
Q3.3 I am confident in my ability to integrate music with other arts subjects ...	Bachelor's Degree	30	3.10	.885
	Master's Degree	37	3.49	.692
	Doctoral Degree	3	3.67	.577
	Total	70	3.33	.793
Q3.4 I am confident in my ability to integrate music with non-arts subjects ...	Bachelor's Degree	30	3.03	.890
	Master's Degree	37	3.30	.878
	Doctoral Degree	3	3.00	1.000
	Total	70	3.17	.884

Q3.5 I enjoy helping students make connections across disciplines.	Bachelor's Degree	30	3.53	.571
	Master's Degree	37	3.59	.644
	Doctoral Degree	3	3.67	.577
	Total	70	3.57	.604
Q3.6 I feel it is important for each subject included in an integrated unit ...	Bachelor's Degree	30	2.70	1.022
	Master's Degree	37	2.76	1.116
	Doctoral Degree	3	2.67	.577
	Total	70	2.73	1.048
Q3.7 In general, my school is supportive of integrated teaching involving the arts.	Bachelor's Degree	30	3.30	.535
	Master's Degree	37	3.00	.816
	Doctoral Degree	3	3.33	.577
	Total	70	3.14	.708

Q3.8 I am free to use integrated teaching strategies as I see fit.	Bachelor's Degree	30	3.63	.669
	Master's Degree	37	3.76	.435
	Doctoral Degree	3	3.67	.577
	Total	70	3.70	.548
Q3.9 Teacher collaboration is an important component of teaching integrated lessons.	Bachelor's Degree	30	3.67	.606
	Master's Degree	37	3.43	.728
	Doctoral Degree	3	3.67	.577
	Total	70	3.54	.674

Q3.10 Self-directed planning time during the school day is an important component ...	Bachelor's Degree	30	3.47	.776
	Master's Degree	37	3.68	.669
	Doctoral Degree	3	4.00	.000
	Total	70	3.60	.710
Q3.11 I feel constrained by curricular integrated teaching.	Bachelor's Degree	30	2.23	.858
	Master's Degree	37	2.11	.906
	Doctoral Degree	3	1.67	.577
	Total	70	2.14	.873
Q3.12 I feel that I don't have enough time to incorporate integrated teaching.	Bachelor's Degree	30	2.70	.915
	Master's Degree	37	2.84	.958
	Doctoral Degree	3	2.33	.577
	Total	70	2.76	.924

Q4.2 I have had appropriate training related to integrating other subjects	Bachelor's Degree	30	1.90	.923
	Master's Degree	37	1.97	.799
	Doctoral Degree	3	2.00	1.000
	Total	70	1.94	.849
Q4.3 I have had in-service professional development training related to integrated...	Bachelor's Degree	30	1.97	.928
	Master's Degree	37	2.08	.954
	Doctoral Degree	3	1.67	1.155
	Total	70	2.01	.940
Q4.4 I have taken one or more arts courses on integrating subjects for college credit.	Bachelor's Degree	30	1.33	.606
	Master's Degree	37	1.46	.960
	Doctoral Degree	3	1.33	.577
	Total	70	1.40	.806

Q4.5 I have gained helpful information from the professional development courses ...	Bachelor's Degree	30	2.40	.968
	Master's Degree	37	2.54	1.120
	Doctoral Degree	3	1.67	1.155
	Total	70	2.44	1.058
Q4.6 The information presented was built upon connections among disciplines ...	Bachelor's Degree	30	2.27	.868
	Master's Degree	37	2.49	1.146
	Doctoral Degree	3	1.67	1.155
	Total	70	2.36	1.036
Q4.7 The professional development challenged me to foster my imagination ...	Bachelor's Degree	30	2.20	.887
	Master's Degree	37	2.46	1.120
	Doctoral Degree	3	1.67	1.155
	Total	70	2.31	1.029

Q4.8 The information I received was adaptable to my teaching environment.	Bachelor's Degree	30	2.40	.855
	Master's Degree	37	2.76	.955
	Doctoral Degree	3	2.00	1.000
	Total	70	2.57	.926
Q4.9 I have conducted professional development sessions related to interdisciplinary ...	Bachelor's Degree	30	1.13	.434
	Master's Degree	37	2.00	1.291
	Doctoral Degree	3	1.67	1.155
	Total	70	1.61	1.081

2-Way ANOVA LEVEL/SUBJECT School District

		<i>Type III Sum</i>		<i>Mean</i>			<i>Partial</i>	<i>Noncent.</i>	<i>Observed</i>
<i>Source</i>		<i>of Squares</i>	<i>df</i>	<i>Square</i>	<i>F</i>	<i>Sig.</i>	<i>Squared</i>	<i>Parameter</i>	<i>Power^b</i>
Q2.2 Using	Corrected Model	14.629 ^a	21	.697	.574	.916	.201	12.056	.351
music to teach	Intercept	134.739	1	134.739	111.044	.000	.698	111.044	1.000
multiplication	Subject	5.963	10	.596	.491	.887	.093	4.915	.221
facts ...	Level Taught	3.747	2	1.874	1.544	.224	.060	3.088	.312
	Subject * Level	5.037	9	.560	.461	.893	.080	4.151	.200
	Error	58.242	48	1.213					
	Total	425.000	70						
	Corrected Total	72.871	69						

a. R Squared = .201 (Adjusted R Squared = -.149)

b. Computed using alpha = .05

		<i>Type III Sum</i>		<i>Mean</i>			<i>Partial</i>	<i>Noncent.</i>	<i>Observed</i>
		<i>of Squares</i>	<i>df</i>	<i>Square</i>	<i>F</i>	<i>Sig.</i>	<i>Squared</i>	<i>Parameter</i>	<i>Power^b</i>
Q2.3 Singing a song about earth day ...	Corrected Model	17.613 ^a	21	.839	.887	.606	.280	18.633	.557
	Intercept	109.426	1	109.426	115.763	.000	.707	115.763	1.000
	Subject	8.763	10	.876	.927	.517	.162	9.271	.421
	Level Taught	4.994	2	2.497	2.641	.082	.099	5.283	.500
	Subject * Level	7.022	9	.780	.825	.596	.134	7.428	.356
	Error	45.372	48	.945					
	Total	339.000	70						
	Corrected Total	62.986	69						

a. R Squared = .280 (Adjusted R Squared = -.036)

b. Computed using alpha = .05

		<i>Type III Sum</i>		<i>Mean</i>			<i>Partial</i>	<i>Noncent.</i>	<i>Observed</i>
<i>Source</i>		<i>of Squares</i>	<i>df</i>	<i>Square</i>	<i>F</i>	<i>Sig.</i>	<i>Squared</i>	<i>Parameter</i>	<i>Power^b</i>
Q2.4 Exploring a	Corrected Model	3.747 ^a	21	.178	1.065	.413	.318	22.372	.660
blues song to	Intercept	42.787	1	42.787	255.481	.000	.842	255.481	1.000
examine its	Subject	1.271	10	.127	.759	.666	.137	7.592	.343
musical	Level Taught	.297	2	.148	.886	.419	.036	1.772	.194
elements...	Subject * Level	1.879	9	.209	1.246	.290	.189	11.217	.537
	Error	8.039	48	.167					
	Total	115.000	70						
	Corrected Total	11.786	69						

a. R Squared = .318 (Adjusted R Squared = .019)

b. Computed using alpha = .05

		<i>Type III</i>						<i>Partial Eta</i>	<i>Noncent.</i>
		<i>Source</i>	<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>	<i>Squared</i>	<i>Parameter</i>
Q2.5 Comparing the painting, “Mother and Child” by Picasso with the Spanish ...	Corrected Model	9.961 ^a	21	.474	2.401	.006	.512	50.428	.981
	Intercept	63.498	1	63.498	321.456	.000	.870	321.456	1.000
	Subject	4.231	10	.423	2.142	.039	.309	21.417	.845
	Level Taught	1.026	2	.513	2.597	.085	.098	5.193	.493
	Subject * Level	5.428	9	.603	3.053	.006	.364	27.479	.946
	Error	9.482	48	.198					
	Total	143.000	70						
Corrected Total		19.443	69						

a. R Squared = .512 (Adjusted R Squared = .299)

b. Computed using alpha = .05

		<i>Type III Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>	<i>Partial Eta Squared</i>	<i>Noncent. Parameter</i>	<i>Observed Power^b</i>
Q2.6 Marching	Corrected Model	18.875 ^a	21	.899	.691	.820	.232	14.520	.429
In place and	Intercept	126.577	1	126.577	97.373	.000	.670	97.373	1.000
playing rhythm	Subject	7.876	10	.788	.606	.801	.112	6.059	.272
sticks while	Level Taught	6.542	2	3.271	2.516	.091	.095	5.032	.480
singing	Subject * Level	10.265	9	1.141	.877	.552	.141	7.897	.379
the song ...	Error	62.396	48	1.300					
	Total	407.000	70						
	Corrected Total	81.271	69						

a. R Squared = .232 (Adjusted R Squared = -.104)

b. Computed using alpha = .05

		<i>Type III Sum</i>		<i>Mean</i>			<i>Partial</i>	<i>Noncent.</i>	<i>Observed</i>
<i>Source</i>		<i>of Squares</i>	<i>df</i>	<i>Square</i>	<i>F</i>	<i>Sig.</i>	<i>Squared</i>	<i>Parameter</i>	<i>Power^b</i>
Q2.7 Presenting	Corrected Model	8.695 ^a	21	.414	1.783	.050	.438	37.435	.915
musical	Intercept	55.964	1	55.964	240.959	.000	.834	240.959	1.000
instruments	Subject	5.769	10	.577	2.484	.017	.341	24.837	.903
of the Ancient	Level Taught	.675	2	.337	1.453	.244	.057	2.906	.296
Silk Road	Subject * Level	4.052	9	.450	1.939	.069	.267	17.447	.770
in general	Error	11.148	48	.232					
music ...	Total	133.000	70						
	Corrected Total	19.843	69						

a. R Squared = .438 (Adjusted R Squared = .192)

b. Computed using alpha = .05

		<i>Type III Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>	<i>Partial Eta Squared</i>	<i>Noncent. Parameter</i>	<i>Observed Power^b</i>
Q2.8 Playing	Corrected Model	9.510 ^a	21	.453	.468	.970	.170	9.831	.281
instruments	Intercept	107.936	1	107.936	111.579	.000	.699	111.579	1.000
while singing a	Subject	4.618	10	.462	.477	.896	.090	4.774	.215
song to	Level Taught	.972	2	.486	.503	.608	.021	1.005	.128
memorize	Subject * Level	4.172	9	.464	.479	.881	.082	4.313	.207
the order ...	Error	46.433	48	.967					
	Total	344.000	70						
	Corrected Total	55.943	69						

a. R Squared = .170 (Adjusted R Squared = -.193)

b. Computed using alpha = .05

		<i>Type III Sum</i>		<i>Mean</i>			<i>Partial</i>	<i>Noncent.</i>	<i>Observed</i>
<i>Source</i>		<i>of Squares</i>	<i>df</i>	<i>Square</i>	<i>F</i>	<i>Sig.</i>	<i>Squared</i>	<i>Parameter</i>	<i>Power^b</i>
Q2.9 Examining	Corrected Model	7.483 ^a	21	.356	1.138	.346	.337	23.894	.695
and comparing	Intercept	51.221	1	51.221	163.547	.000	.777	163.547	1.000
the ritual	Subject	2.777	10	.278	.887	.552	.159	8.867	.401
“This Train is	Level Taught	.878	2	.439	1.402	.256	.056	2.805	.286
Bound for	Subject * Level	4.090	9	.454	1.451	.194	.217	13.059	.615
Glory”	Error	14.720	47	.313					
	Total	137.000	69						
	Corrected Total	22.203	68						

a. R Squared = .337 (Adjusted R Squared = .041)

b. Computed using alpha = .05

		<i>Type III Sum</i>		<i>Mean</i>			<i>Partial</i>	<i>Noncent.</i>	<i>Observed</i>
<i>Source</i>		<i>of Squares</i>	<i>df</i>	<i>Square</i>	<i>F</i>	<i>Sig.</i>	<i>Squared</i>	<i>Parameter</i>	<i>Power^b</i>
Q2.10 Playing	Corrected Model	9.713 ^a	21	.463	.801	.705	.259	16.814	.501
Copland's	Intercept	76.250	1	76.250	131.989	.000	.733	131.989	1.000
"Fanfare	Subject	3.387	10	.339	.586	.817	.109	5.862	.263
for the	Level Taught	2.194	2	1.097	1.899	.161	.073	3.797	.375
Common Man"	Subject * Level	4.807	9	.534	.925	.513	.148	8.321	.400
while a	Error	27.729	48	.578					
classroom ...	Total	201.000	70						
	Corrected Total	37.443	69						

a. R Squared = .259 (Adjusted R Squared = -.065)

b. Computed using alpha = .05

		<i>Type III Sum</i>		<i>Mean</i>			<i>Partial</i>	<i>Noncent.</i>	<i>Observed</i>
<i>Source</i>		<i>of Squares</i>	<i>df</i>	<i>Square</i>	<i>F</i>	<i>Sig.</i>	<i>Squared</i>	<i>Parameter</i>	<i>Power^b</i>
Q3.2 I feel it is important for students to experience integrated arts curricula.	Corrected Model	10.897 ^a	21	.519	1.217	.281	.347	25.548	.736
	Intercept	77.644	1	77.644	182.031	.000	.791	182.031	1.000
	Subject	5.381	10	.538	1.261	.279	.208	12.614	.570
	Level Taught	1.982	2	.991	2.324	.109	.088	4.647	.448
	Subject * Level	3.739	9	.415	.974	.473	.154	8.765	.422
	Error	20.474	48	.427					
	Total	198.000	70						
Corrected Total		31.371	69						

a. R Squared = .347 (Adjusted R Squared = .062)

b. Computed using alpha = .05

		<i>Type III Sum</i>		<i>Mean</i>			<i>Partial</i>	<i>Noncent.</i>	<i>Observed</i>
<i>Source</i>		<i>of Squares</i>	<i>df</i>	<i>Square</i>	<i>F</i>	<i>Sig.</i>	<i>Eta Squared</i>	<i>Parameter</i>	<i>Power^b</i>
Q3.3 I am	Corrected Model	15.366 ^a	21	.732	1.251	.256	.354	26.270	.752
confident in	Intercept	88.937	1	88.937	152.046	.000	.760	152.046	1.000
my ability to	Subject	9.982	10	.998	1.707	.107	.262	17.066	.733
integrate music	Level Taught	.669	2	.334	.572	.568	.023	1.143	.139
with non-arts	Subject * Level	5.003	9	.556	.950	.492	.151	8.553	.411
subjects ...	Error	28.077	48	.585					
	Total	239.000	70						
	Corrected Total	43.443	69						

a. R Squared = .354 (Adjusted R Squared = .071)

b. Computed using alpha = .05

		<i>Type III Sum</i>		<i>Mean</i>			<i>Partial</i>	<i>Noncent.</i>	<i>Observed</i>
<i>Source</i>		<i>of Squares</i>	<i>df</i>	<i>Square</i>	<i>F</i>	<i>Sig.</i>	<i>Squared</i>	<i>Parameter</i>	<i>Power^b</i>
Q3.4 I am	Corrected Model	13.168 ^a	21	.627	.738	.773	.244	15.501	.460
confident in my	Intercept	94.108	1	94.108	110.783	.000	.698	110.783	1.000
ability to	Subject	6.016	10	.602	.708	.712	.129	7.083	.319
integrate music	Level Taught	.913	2	.457	.538	.588	.022	1.075	.134
with non-arts	Subject * Level	6.037	9	.671	.790	.627	.129	7.106	.340
subjects ...	Error	40.775	48	.849					
	Total	288.000	70						
	Corrected Total	53.943	69						

a. R Squared = .244 (Adjusted R Squared = -.087)

b. Computed using alpha = .05

		<i>Type III Sum</i>		<i>Mean</i>			<i>Partial</i>	<i>Noncent.</i>	<i>Observed</i>
<i>Source</i>		<i>of Squares</i>	<i>df</i>	<i>Square</i>	<i>F</i>	<i>Sig.</i>	<i>Eta Squared</i>	<i>Parameter</i>	<i>Power^b</i>
Q3.5 I enjoy	Corrected Model	7.824 ^a	21	.373	1.033	.447	.311	21.683	.642
helping students	Intercept	57.625	1	57.625	159.707	.000	.769	159.707	1.000
make	Subject	2.596	10	.260	.719	.702	.130	7.195	.324
connections	Level Taught	.730	2	.365	1.011	.371	.040	2.023	.216
across	Subject * Level	4.212	9	.468	1.297	.263	.196	11.672	.558
disciplines.	Error	17.319	48	.361					
	Total	168.000	70						
	Corrected Total	25.143	69						

a. R Squared = .311 (Adjusted R Squared = .010)

b. Computed using alpha = .05

		<i>Type III Sum</i>		<i>Mean</i>			<i>Partial</i>	<i>Noncent.</i>	<i>Observed</i>
<i>Source</i>		<i>of Squares</i>	<i>df</i>	<i>Square</i>	<i>F</i>	<i>Sig.</i>	<i>Squared</i>	<i>Parameter</i>	<i>Power^b</i>
Q3.6 I feel it is important for students to experience integrated arts Curricula.	Corrected Model	23.651 ^a	21	1.126	1.036	.443	.312	21.752	.644
	Intercept	142.208	1	142.208	130.787	.000	.732	130.787	1.000
	Subject	4.829	10	.483	.444	.917	.085	4.441	.201
	Level Taught	5.893	2	2.947	2.710	.077	.101	5.420	.511
	Subject * Level	11.514	9	1.279	1.177	.331	.181	10.589	.509
	Error	52.192	48	1.087					
	Total	437.000	70						
	Corrected Total	75.843	69						

a. R Squared = .312 (Adjusted R Squared = .011)

b. Computed using alpha = .05

		<i>Type III Sum</i>		<i>Mean</i>			<i>Partial</i>	<i>Noncent.</i>	<i>Observed</i>
<i>Source</i>		<i>of Squares</i>	<i>df</i>	<i>Square</i>	<i>F</i>	<i>Sig.</i>	<i>Squared</i>	<i>Parameter</i>	<i>Power^b</i>
Q3.7 In general, my school is supportive of integrated teaching involving the arts.	Corrected Model	7.900 ^a	21	.376	.677	.834	.229	14.218	.420
	Intercept	90.752	1	90.752	163.326	.000	.773	163.326	1.000
	Subject	4.632	10	.463	.834	.599	.148	8.336	.378
	Level Taught	.094	2	.047	.084	.919	.003	.169	.062
	Subject * Level	1.999	9	.222	.400	.929	.070	3.597	.176
	Error	26.671	48	.556					
	Total	276.000	70						
	Corrected Total	34.571	69						

a. R Squared = .229 (Adjusted R Squared = -.109)

b. Computed using alpha = .05

		<i>Type III Sum</i>		<i>Mean</i>			<i>Partial</i>		
		<i>of Squares</i>	<i>df</i>	<i>Square</i>	<i>F</i>	<i>Sig.</i>	<i>Square</i>	<i>Noncent.</i>	<i>Observed</i>
<i>Source</i>							<i>d</i>	<i>Parameter</i>	<i>Power^b</i>
Q3.8 I am free	Corrected Model	10.866 ^a	21	.517	2.525	.004	.525	53.033	.987
to use integrated	Intercept	55.749	1	55.749	272.099	.000	.850	272.099	1.000
teaching	Subject	9.693	10	.969	4.731	.000	.496	47.308	.998
strategies	Level Taught	.213	2	.107	.521	.597	.021	1.042	.131
as I see fit.	Subject * Level	1.683	9	.187	.913	.522	.146	8.215	.395
	Error	9.834	48	.205					
	Total	139.000	70						
	Corrected Total	20.700	69						

a. R Squared = .525 (Adjusted R Squared = .317)

b. Computed using alpha = .05

		<i>Type III Sum</i>		<i>Mean</i>			<i>Partial</i>	<i>Noncent.</i>	<i>Observed</i>
<i>Source</i>		<i>of Squares</i>	<i>df</i>	<i>Square</i>	<i>F</i>	<i>Sig.</i>	<i>Squared</i>	<i>Parameter</i>	<i>Power^b</i>
Q3.9 Teacher	Corrected Model	7.814 ^a	21	.372	.758	.752	.249	15.922	.474
collaboration	Intercept	55.814	1	55.814	113.725	.000	.703	113.725	1.000
is an important	Subject	4.851	10	.485	.988	.466	.171	9.884	.450
component of	Level Taught	1.040	2	.520	1.060	.354	.042	2.120	.225
teaching	Subject * Level	1.578	9	.175	.357	.950	.063	3.216	.160
integrated ...	Error	23.557	48	.491					
	Total	180.000	70						
	Corrected Total	31.371	69						

a. R Squared = .249 (Adjusted R Squared = -.079)

b. Computed using alpha = .05

		<i>Type III Sum</i>		<i>Mean</i>			<i>Partial</i>		
		<i>of Squares</i>	<i>df</i>	<i>Square</i>	<i>F</i>	<i>Sig.</i>	<i>Square</i>	<i>Noncent.</i>	<i>Observed</i>
<i>Source</i>							<i>d</i>	<i>Parameter</i>	<i>Power^b</i>
Q3.10 Self-	Corrected Model	7.874 ^a	21	.375	.668	.842	.226	14.036	.414
directed	Intercept	57.840	1	57.840	103.107	.000	.682	103.107	1.000
planning time	Subject	4.374	10	.437	.780	.648	.140	7.797	.353
during the	Level Taught	.176	2	.088	.157	.855	.006	.314	.073
school day	Subject * Level	3.075	9	.342	.609	.783	.102	5.481	.261
is an important	Error	26.926	48	.561					
component ...	Total	172.000	70						
	Corrected Total	34.800	69						

a. R Squared = .226 (Adjusted R Squared = -.112)

b. Computed using alpha = .05

		<i>Type III Sum</i>		<i>Mean</i>			<i>Partial</i>	<i>Noncent.</i>	<i>Observed</i>
<i>Source</i>		<i>of Squares</i>	<i>df</i>	<i>Square</i>	<i>F</i>	<i>Sig.</i>	<i>Eta Squared</i>	<i>Parameter</i>	<i>Power^b</i>
Q3.11 I feel constrained by curricular integrated teaching.	Corrected Model	23.745 ^a	21	1.131	1.883	.036	.452	39.537	.932
	Intercept	204.190	1	204.190	340.000	.000	.876	340.000	1.000
	Subject	10.462	10	1.046	1.742	.098	.266	17.421	.744
	Level Taught	1.566	2	.783	1.304	.281	.052	2.607	.269
	Subject * Level	7.325	9	.814	1.355	.235	.203	12.198	.581
	Error	28.827	48	.601					
	Total	624.000	70						
	Corrected Total	52.571	69						

a. R Squared = .452 (Adjusted R Squared = .212)

b. Computed using alpha = .05

		<i>Type III Sum</i>		<i>Mean</i>			<i>Partial</i>	<i>Noncent.</i>	<i>Observed</i>
	<i>Source</i>	<i>of Squares</i>	<i>df</i>	<i>Square</i>	<i>F</i>	<i>Sig.</i>	<i>Squared</i>	<i>Parameter</i>	<i>Power^b</i>
Q3.12 I feel	Corrected Model	21.295 ^a	21	1.014	1.295	.226	.362	27.201	.771
that I don't have	Intercept	179.511	1	179.511	229.304	.000	.827	229.304	1.000
enough time to	Subject	13.811	10	1.381	1.764	.094	.269	17.642	.750
incorporate	Level Taught	.482	2	.241	.308	.737	.013	.615	.096
integrated	Subject * Level	5.693	9	.633	.808	.611	.132	7.272	.348
teaching.	Error	37.577	48	.783					
	Total	411.000	70						
	Corrected Total	58.871	69						

a. R Squared = .362 (Adjusted R Squared = .082)

b. Computed using alpha = .05

		<i>Type III Sum</i>		<i>Mean</i>			<i>Partial</i>	<i>Noncent.</i>	<i>Observed</i>
<i>Source</i>		<i>of Squares</i>	<i>df</i>	<i>Square</i>	<i>F</i>	<i>Sig.</i>	<i>Squared</i>	<i>Parameter</i>	<i>Power^b</i>
Q4.2 I have had appropriate training related to incorporate integrated teaching.	Corrected Model	18.006 ^a	21	.857	1.296	.225	.362	27.209	.771
	Intercept	239.170	1	239.170	361.408	.000	.883	361.408	1.000
	Subject	11.161	10	1.116	1.687	.112	.260	16.866	.727
	Level Taught	.980	2	.490	.740	.482	.030	1.480	.168
	Subject * Level	5.734	9	.637	.963	.482	.153	8.664	.417
	Error	31.765	48	.662					
	Total	704.000	70						
Corrected Total		49.771	69						

a. R Squared = .362 (Adjusted R Squared = .083)

b. Computed using alpha = .05

		<i>Type III Sum</i>		<i>Mean</i>			<i>Partial</i>	<i>Noncent.</i>	<i>Observed</i>
<i>Source</i>		<i>of Squares</i>	<i>df</i>	<i>Square</i>	<i>F</i>	<i>Sig.</i>	<i>Squared</i>	<i>Parameter</i>	<i>Power^b</i>
Q4.3 I have had	Corrected Model	23.969 ^a	21	1.141	1.480	.130	.393	31.082	.839
in-service	Intercept	223.125	1	223.125	289.333	.000	.858	289.333	1.000
professional	Subject	13.244	10	1.324	1.717	.104	.264	17.174	.736
development	Level Taught	.801	2	.400	.519	.598	.021	1.038	.131
training	Subject * Level	8.524	9	.947	1.228	.301	.187	11.053	.530
related ...	Error	37.016	48	.771					
	Total	685.000	70						
	Corrected Total	60.986	69						

a. R Squared = .393 (Adjusted R Squared = .127)

b. Computed using alpha = .05

		<i>Type III Sum</i>		<i>Mean</i>			<i>Partial</i>	<i>Noncent.</i>	<i>Observed</i>
<i>Source</i>		<i>of Squares</i>	<i>df</i>	<i>Square</i>	<i>F</i>	<i>Sig.</i>	<i>Eta Squared</i>	<i>Parameter</i>	<i>Power^b</i>
Q4.4 I have taken one or more arts courses on integrating subjects for college credit.	Corrected Model	6.858 ^a	21	.327	.413	.985	.153	8.677	.246
	Intercept	367.274	1	367.274	464.639	.000	.906	464.639	1.000
	Subject	3.030	10	.303	.383	.948	.074	3.834	.176
	Level Taught	.465	2	.232	.294	.747	.012	.588	.094
	Subject * Level	2.670	9	.297	.375	.941	.066	3.378	.166
	Error	37.942	48	.790					
	Total	952.000	70						
Corrected Total		44.800	69						

a. R Squared = .153 (Adjusted R Squared = -.217)

b. Computed using alpha = .05

		<i>Type III Sum</i>		<i>Mean</i>			<i>Partial</i>	<i>Noncent.</i>	<i>Observed</i>
<i>Source</i>		<i>of Squares</i>	<i>df</i>	<i>Square</i>	<i>F</i>	<i>Sig.</i>	<i>Eta Squared</i>	<i>Parameter</i>	<i>Power^b</i>
Q4.5 I have	Corrected Model	36.309 ^a	21	1.729	2.026	.022	.470	42.548	.952
gained helpful	Intercept	193.210	1	193.210	226.406	.000	.825	226.406	1.000
information	Subject	21.721	10	2.172	2.545	.015	.347	25.453	.911
from the	Level Taught	.199	2	.099	.116	.890	.005	.233	.067
professional	Subject * Level	9.631	9	1.070	1.254	.286	.190	11.286	.540
development	Error	40.962	48	.853					
courses ...	Total	535.000	70						
	Corrected Total	77.271	69						

a. R Squared = .470 (Adjusted R Squared = .238)

b. Computed using alpha = .05

		<i>Type III Sum</i>		<i>Mean</i>			<i>Partial</i>	<i>Noncent.</i>	<i>Observed</i>
		<i>of Squares</i>	<i>df</i>	<i>Square</i>	<i>F</i>	<i>Sig.</i>	<i>Eta Squared</i>	<i>Parameter</i>	<i>Power^b</i>
Q4.6 The information presented was built upon connections among disciplines ...	Corrected Model	37.298 ^a	21	1.776	2.318	.008	.504	48.684	.977
	Intercept	199.518	1	199.518	260.427	.000	.844	260.427	1.000
	Subject	21.511	10	2.151	2.808	.008	.369	28.077	.940
	Level Taught	.037	2	.019	.024	.976	.001	.048	.053
	Subject * Level	12.775	9	1.419	1.853	.083	.258	16.675	.747
	Error	36.774	48	.766					
	Total	563.000	70						
Corrected Total		74.071	69						

a. R Squared = .504 (Adjusted R Squared = .286)

b. Computed using alpha = .05

		<i>Type III Sum</i>		<i>Mean</i>			<i>Partial</i>	<i>Noncent.</i>	<i>Observed</i>
	<i>Source</i>	<i>of Squares</i>	<i>df</i>	<i>Square</i>	<i>F</i>	<i>Sig.</i>	<i>Squared</i>	<i>Parameter</i>	<i>Power^b</i>
Q4.7 The	Corrected Model	34.235 ^a	21	1.630	2.014	.023	.468	42.297	.950
professional	Intercept	215.858	1	215.858	266.693	.000	.847	266.693	1.000
development	Subject	18.676	10	1.868	2.307	.026	.325	23.074	.876
challenged	Level Taught	.501	2	.251	.310	.735	.013	.620	.096
me to foster	Subject * Level	12.776	9	1.420	1.754	.103	.247	15.784	.718
my imagination	Error	38.851	48	.809					
...	Total	578.000	70						
	Corrected Total	73.086	69						

a. R Squared = .468 (Adjusted R Squared = .236)

b. Computed using alpha = .05

		<i>Type III Sum</i>		<i>Mean</i>			<i>Partial</i>	<i>Noncent.</i>	<i>Observed</i>
	<i>Source</i>	<i>of Squares</i>	<i>df</i>	<i>Square</i>	<i>F</i>	<i>Sig.</i>	<i>Squared</i>	<i>Parameter</i>	<i>Power^b</i>
Q4.8 The	Corrected Model	23.487 ^a	21	1.118	1.506	.121	.397	31.618	.847
information	Intercept	176.941	1	176.941	238.198	.000	.832	238.198	1.000
I received was	Subject	14.935	10	1.493	2.011	.053	.295	20.105	.816
adaptable	Level Taught	.685	2	.342	.461	.633	.019	.922	.121
to my teaching	Subject * Level	4.587	9	.510	.686	.718	.114	6.175	.294
environment.	Error	35.656	48	.743					
	Total	472.000	70						
	Corrected Total	59.143	69						

a. R Squared = .397 (Adjusted R Squared = .133)

b. Computed using alpha = .05

		<i>Type III Sum</i>		<i>Mean</i>			<i>Partial</i>	<i>Noncent.</i>	<i>Observed</i>
<i>Source</i>		<i>of Squares</i>	<i>df</i>	<i>Square</i>	<i>F</i>	<i>Sig.</i>	<i>Eta Squared</i>	<i>Parameter</i>	<i>Power^b</i>
Q4.9 I have conducted professional development sessions related ...	Corrected Model	24.963 ^a	21	1.189	1.026	.453	.310	21.543	.639
	Intercept	282.236	1	282.236	243.560	.000	.835	243.560	1.000
	Subject	12.323	10	1.232	1.063	.408	.181	10.635	.484
	Level Taught	3.024	2	1.512	1.305	.281	.052	2.610	.269
	Subject * Level	13.011	9	1.446	1.248	.290	.190	11.228	.538
	Error	55.622	48	1.159					
	Total	883.000	70						
	Corrected Total	80.586	69						

a. R Squared = .310 (Adjusted R Squared = .008)

b. Computed using alpha = .05

APPENDIX F Results From State

Survey Question	School Level Taught	<i>N</i>	<i>M</i>	<i>SD</i>
Q2.2 Using music to teach multiplication facts ...	Elementary	52	2.85	.958
	Middle School/Junior High	33	2.67	1.137
	High School	37	3.03	.928
	Elementary, Middle School	7	3.86	.378
	Elementary, Middle School/Junior High, High School	4	3.25	.500
	Middle School/Junior High, High School	14	2.64	1.082
	Total	147	2.89	1.001

Q2.3 Singing a song about earth day ...	Elementary	52	2.75	.883
	Middle School/Junior High	33	2.88	.857
	High School	37	3.27	.871
	Elementary, Middle School	7	4.00	.000
	Elementary, Middle School/Junior High, High School	4	3.75	.500
	Middle School/Junior High, High School	14	2.93	.829
	Total	147	3.01	.891
Q2.4 Exploring a blues song to examine its musical elements...	Elementary	52	3.92	.269
	Middle School/Junior High	33	3.70	.467
	High School	37	3.59	.762
	Elementary, Middle School	7	4.00	.000
	Elementary, Middle School/Junior High, High School	4	4.00	.000
	Middle School/Junior High, High School	14	3.93	.267
	Total	147	3.80	.496

Q2.5 Comparing the painting, “Mother and Child” by Picasso with the Spanish song ...	Elementary	52	3.73	.528
	Middle School/Junior High	33	3.58	.614
	High School	37	3.57	.765
	Elementary, Middle School	7	3.29	.951
	Elementary, Middle School/Junior High, High School	4	3.75	.500
	Middle School/Junior High, High School	14	3.71	.469
	Total	147	3.63	.631
Q2.6 Marching in place and playing rhythm sticks while singing the song ...	Elementary	52	2.81	1.138
	Middle School/Junior High	33	2.55	1.175
	High School	37	3.11	1.075
	Elementary, Middle School	7	3.14	1.069
	Elementary, Middle School/Junior High, High School	4	2.50	1.732
	Middle School/Junior High, High School	14	3.00	.679
	Total	147	2.85	1.113

Q2.7 Presenting musical instruments of the	Elementary	52	3.75	.437
Ancient Silk Road in general music ...	Middle School/Junior High	33	3.55	.564
	High School	37	3.57	.801
	Elementary, Middle School	7	4.00	.000
	Elementary, Middle School/Junior High, High School	4	2.75	.957
	Middle School/Junior High, High School	14	3.36	.842
	Total	147	3.61	.647
Q2.8 Playing instruments while singing a	Elementary	52	2.77	.962
song to memorize the order of the	Middle School/Junior High	33	2.88	1.053
planets	High School	37	3.11	1.022
	Elementary, Middle School	7	3.71	.488
	Elementary, Middle School/Junior High, High School	4	2.75	.957
	Middle School/Junior High, High School	14	3.00	1.109
	Total	147	2.95	1.005

Q2.9 Examining and comparing the ritual	Elementary	52	3.77	.469
“This Train is Bound for Glory”	Middle School/Junior High	33	3.61	.659
	High School	37	3.57	.801
	Elementary, Middle School	7	4.00	.000
	Elementary, Middle School/Junior High, High School	4	3.25	.500
	Middle School/Junior High, High School	14	3.57	.646
	Total	147	3.66	.625
Q2.10 Playing Copland's "Fanfare for the	Elementary	52	3.48	.779
Common Man" while a classroom ...	Middle School/Junior High	33	3.27	.674
	High School	37	3.35	.949
	Elementary, Middle School	7	4.00	.000
	Elementary, Middle School/Junior High, High School	4	3.75	.500
	Middle School/Junior High, High School	14	3.14	.949
	Total	147	3.40	.808

Q3.2 I feel it is important for students to experience integrated arts curricula.	Elementary	52	3.37	.715
	Middle School/Junior High	33	3.45	.666
	High School	37	3.46	.767
	Elementary, Middle School	7	3.71	.488
	Elementary, Middle School/Junior High, High School	4	3.50	.577
	Middle School/Junior High, High School	14	3.64	.633
	Total	147	3.46	.695
Q3.3 I am confident in my ability to integrate music with other arts subjects ...	Elementary	52	3.23	.703
	Middle School/Junior High	33	2.91	.947
	High School	37	3.41	.798
	Elementary, Middle School	7	4.00	.000
	Elementary, Middle School/Junior High, High School	4	3.25	.500
	Middle School/Junior High, High School	14	3.36	.929
	Total	147	3.25	.818

Q3.4 I am confident in my ability to	Elementary	52	3.02	.918
integrate				
music with non-arts subjects ...	Middle School/Junior High	33	3.06	.864
	High School	37	3.32	.709
	Elementary, Middle School	7	4.00	.000
	Elementary, Middle School/Junior High, High School	4	2.75	.957
	Middle School/Junior High, High School	14	3.14	1.027
	Total	147	3.16	.866
Q3.5 I enjoy helping students make	Elementary	52	3.44	.777
connections across disciplines.	Middle School/Junior High	33	3.67	.540
	High School	37	3.51	.768
	Elementary, Middle School	7	3.71	.488
	Elementary, Middle School/Junior High, High School	4	3.50	.577
	Middle School/Junior High, High School	14	3.50	.855
	Total	147	3.53	.715

Q3.6 I feel it is important for each subject included in an integrated unit ...	Elementary	52	2.71	.957
	Middle School/Junior High	33	2.88	.893
	High School	37	2.84	1.014
	Elementary, Middle School	7	3.00	1.000
	Elementary, Middle School/Junior High, High School	4	2.50	.577
	Middle School/Junior High, High School	14	2.64	1.008
	Total	147	2.78	.947
Q3.7 In general, my school is supportive of integrated teaching involving the arts.	Elementary	52	3.10	.869
	Middle School/Junior High	33	2.94	.747
	High School	37	3.24	.863
	Elementary, Middle School	7	3.71	.488
	Elementary, Middle School/Junior High, High School	4	3.50	.577
	Middle School/Junior High, High School	14	2.50	.855
	Total	147	3.08	.848

Q3.8 I am free to use integrated teaching strategies as I see fit.	Elementary	52	3.63	.595
	Middle School/Junior High	33	3.61	.788
	High School	37	3.65	.484
	Elementary, Middle School	7	4.00	.000
	Elementary, Middle School/Junior High, High School	4	3.50	.577
	Middle School/Junior High, High School	14	3.43	.646
	Total	147	3.63	.611
Q3.9 Teacher collaboration is an important component of teaching integrated lessons.	Elementary	52	3.46	.828
	Middle School/Junior High	33	3.64	.603
	High School	37	3.46	.767
	Elementary, Middle School	7	4.00	.000
	Elementary, Middle School/Junior High, High School	4	3.50	.577
	Middle School/Junior High, High School	14	3.50	.519
	Total	147	3.53	.715

Q3.10 Self-directed planning time during the school day is an important component	Elementary	52	3.60	.664
	Middle School/Junior High	33	3.48	.795
..	High School	37	3.57	.603
	Elementary, Middle School	7	4.00	.000
	Elementary, Middle School/Junior High, High School	4	3.25	.500
	Middle School/Junior High, High School	14	3.71	.611
	Total	147	3.59	.660
Q3.11 I feel constrained by curricular integrated teaching.	Elementary	52	2.25	.947
	Middle School/Junior High	33	2.36	1.113
	High School	37	2.14	1.004
	Elementary, Middle School	7	2.14	1.069
	Elementary, Middle School/Junior High, High School	4	2.25	.957
	Middle School/Junior High, High School	14	2.00	.877
	Total	147	2.22	.990

Q3.12 I feel that I don't have enough time to incorporate integrated teaching.	Elementary	52	3.00	.816
	Middle School/Junior High	33	2.91	.843
	High School	37	2.57	1.068
	Elementary, Middle School	7	2.14	1.069
	Elementary, Middle School/Junior High, High School	4	3.00	1.155
	Middle School/Junior High, High School	14	3.00	.784
	Total	147	2.83	.924
Q4.2 I have had appropriate training related to integrating other subjects	Elementary	52	1.96	.907
	Middle School/Junior High	33	1.94	.966
	High School	37	2.00	.972
	Elementary, Middle School	7	3.00	.816
	Elementary, Middle School/Junior High, High School	4	2.00	.816
	Middle School/Junior High, High School	14	1.64	.745
	Total	147	1.99	.936

Q4.3 I have had in-service professional development training related to integrated...	Elementary	52	1.94	1.037
	Middle School/Junior High	33	1.82	.950
	High School	37	1.89	.875
	Elementary, Middle School	7	2.57	1.397
	Elementary, Middle School/Junior High, High School	4	2.00	.816
	Middle School/Junior High, High School	14	1.29	.611
	Total	147	1.87	.974
Q4.4 I have taken one or more arts courses on integrating subjects for college credit.	Elementary	52	1.52	.874
	Middle School/Junior High	33	1.48	.972
	High School	37	1.62	.924
	Elementary, Middle School	7	1.86	1.464
	Elementary, Middle School/Junior High, High School	4	1.75	.500
	Middle School/Junior High, High School	14	1.21	.426
	Total	147	1.53	.901

Q4.5 I have gained helpful information from the professional development courses ...	Elementary	52	2.50	1.057
	Middle School/Junior High	33	2.27	1.069
	High School	37	2.05	1.026
	Elementary, Middle School	7	2.29	1.604
	Elementary, Middle School/Junior High, High School	4	2.50	1.000
	Middle School/Junior High, High School	14	1.50	.650
	Total	147	2.23	1.073
Q4.6 The information presented was built upon connections among disciplines ...	Elementary	52	2.37	.991
	Middle School/Junior High	33	2.09	1.071
	High School	37	2.00	1.000
	Elementary, Middle School	7	2.29	1.604
	Elementary, Middle School/Junior High, High School	4	2.75	.957
	Middle School/Junior High, High School	14	1.50	.650
	Total	147	2.14	1.038

Q4.7 The professional development	Elementary	52	2.27	.992
challenged me to foster my	Middle School/Junior High	33	2.21	1.166
imagination ...	High School	37	2.11	.936
	Elementary, Middle School	7	2.29	1.604
	Elementary, Middle School/Junior High, High School	4	2.75	.957
	Middle School/Junior High, High School	14	1.36	.633
	Total	147	2.14	1.047
Q4.8 The information I received was	Elementary	52	2.46	.896
adaptable to my teaching environment.	Middle School/Junior High	33	2.15	1.064
	High School	37	2.14	.918
	Elementary, Middle School	7	2.29	1.604
	Elementary, Middle School/Junior High, High School	4	2.50	.577
	Middle School/Junior High, High School	14	1.79	.699
	Total	147	2.24	.968

Q4.9 I have conducted professional	Elementary	52	1.52	1.000
development sessions related to	Middle School/Junior High	33	1.58	1.032
interdisciplinary ...	High School	37	1.59	.865
	Elementary, Middle School	7	3.14	1.464
	Elementary, Middle School/Junior High, High School	4	1.50	.577
	Middle School/Junior High, High School	14	1.43	.852
	Total	147	1.62	1.023

State Groups Statistics from All Questions Comparing Subject of School Taught

Survey Question	Subject Taught	<i>N</i>	<i>M</i>	<i>SD</i>
Q2.2 Using music to teach multiplication facts ...	General Music	33	2.82	.950
	Choir	11	3.36	.924
	Band/Orchestra	33	3.00	.901
	Other	1	4.00	.
	General Music, Choir	30	3.03	1.098
	General Music, Choir, Other	10	2.50	1.179
	General Music, Band/Orchestra	14	2.93	.616
	General Music, Band/Orchestra, Other	1	3.00	.
	Band/Orchestra, Other	2	2.00	.000
	Choir, Band/Orchestra, Other	1	1.00	.
	General Music, Choir, Band/Orchestra	6	2.00	1.265
	General Music, Other	2	3.50	.707
	Choir, Band/Orchestra	2	2.50	2.121
	Choir, Other	1	3.00	.
	Total	147	2.89	1.001

Q2.3 Singing a song about earth day ...	General Music	33	2.73	.839
	Choir	11	3.36	.809
	Band/Orchestra	33	3.06	.899
	Other	1	4.00	.
	General Music, Choir	30	3.23	1.006
	General Music, Choir, Other	10	2.80	.789
	General Music, Band/Orchestra	14	3.14	.663
	General Music, Band/Orchestra, Other	1	2.00	.
	Band/Orchestra, Other	2	3.00	.000
	Choir, Band/Orchestra, Other	1	2.00	.
	General Music, Choir, Band/Orchestra	6	2.50	1.225
	General Music, Other	2	3.50	.707
	Choir, Band/Orchestra	2	3.50	.707
	Choir, Other	1	3.00	.
	Total	147	3.01	.891

Q2.4 Exploring a blues song to examine its musical elements...	General Music	33	3.91	.292
	Choir	11	3.73	.467
	Band/Orchestra	33	3.79	.415
	Other	1	4.00	.
	General Music, Choir	30	3.83	.379
	General Music, Choir, Other	10	3.90	.316
	General Music, Band/Orchestra	14	3.71	.469
	General Music, Band/Orchestra, Other	1	4.00	.
	Band/Orchestra, Other	2	4.00	.000
	Choir, Band/Orchestra, Other	1	4.00	.
	General Music, Choir, Band/Orchestra	6	2.83	1.472
	General Music, Other	2	4.00	.000
	Choir, Band/Orchestra	2	4.00	.000
	Choir, Other	1	4.00	.
	Total	147	3.80	.496

Q2.5 Comparing the painting, “Mother and Child” by Picasso with the Spanish song ...	General Music	33	3.64	.699
	Choir	11	3.73	.467
	Band/Orchestra	33	3.70	.529
	Other	1	3.00	.
	General Music, Choir	30	3.73	.521
	General Music, Choir, Other	10	3.70	.483
	General Music, Band/Orchestra	14	3.43	.514
	General Music, Band/Orchestra, Other	1	4.00	.
	Band/Orchestra, Other	2	4.00	.000
	Choir, Band/Orchestra, Other	1	3.00	.
	General Music, Choir, Band/Orchestra	6	2.83	1.472
	General Music, Other	2	4.00	.000
	Choir, Band/Orchestra	2	4.00	.000
	Choir, Other	1	3.00	.
	Total	147	3.63	.631

Q2.6 Marching in place and playing rhythm	General Music	33	2.70	1.132
sticks while singing the song ...	Choir	11	3.27	1.191
	Band/Orchestra	33	3.06	.899
	Other	1	3.00	.
	General Music, Choir	30	2.83	1.262
	General Music, Choir, Other	10	2.50	1.434
	General Music, Band/Orchestra	14	2.86	.864
	General Music, Band/Orchestra, Other	1	2.00	.
	Band/Orchestra, Other	2	4.00	.000
	Choir, Band/Orchestra, Other	1	3.00	.
	General Music, Choir, Band/Orchestra	6	2.00	.894
	General Music, Other	2	2.50	2.121
	Choir, Band/Orchestra	2	4.00	.000
	Choir, Other	1	2.00	.
	Total	147	2.85	1.113

Q2.7 Presenting musical instruments of the	General Music	33	3.70	.467
Ancient Silk Road in general music ...	Choir	11	3.55	.688
	Band/Orchestra	33	3.64	.549
	Other	1	4.00	.
	General Music, Choir	30	3.70	.651
	General Music, Choir, Other	10	3.60	.516
	General Music, Band/Orchestra	14	3.50	.650
	General Music, Band/Orchestra, Other	1	2.00	.
	Band/Orchestra, Other	2	4.00	.000
	Choir, Band/Orchestra, Other	1	4.00	.
	General Music, Choir, Band/Orchestra	6	2.67	1.366
	General Music, Other	2	3.50	.707
	Choir, Band/Orchestra	2	4.00	.000
	Choir, Other	1	4.00	.
	Total	147	3.61	.647

Q2.8 Playing instruments while singing a song to memorize the order of the planets	General Music	33	2.70	.984
	Choir	11	3.36	1.120
	Band/Orchestra	33	3.00	.901
	Other	1	4.00	.
	General Music, Choir	30	3.10	.995
	General Music, Choir, Other	10	2.70	1.252
	General Music, Band/Orchestra	14	3.14	.663
	General Music, Band/Orchestra, Other	1	3.00	.
	Band/Orchestra, Other	2	3.00	.000
	Choir, Band/Orchestra, Other	1	1.00	.
	General Music, Choir, Band/Orchestra	6	2.17	1.472
	General Music, Other	2	3.00	1.414
	Choir, Band/Orchestra	2	4.00	.000
	Choir, Other	1	3.00	.
	Total	147	2.95	1.005

Q2.9 Examining and comparing the ritual	General Music	33	3.76	.502
“This Train is Bound for Glory”	Choir	11	3.73	.467
	Band/Orchestra	33	3.61	.659
	Other	1	4.00	.
	General Music, Choir	30	3.73	.521
	General Music, Choir, Other	10	3.70	.675
	General Music, Band/Orchestra	14	3.64	.497
	General Music, Band/Orchestra, Other	1	3.00	.
	Band/Orchestra, Other	2	4.00	.000
	Choir, Band/Orchestra, Other	1	4.00	.
	General Music, Choir, Band/Orchestra	6	2.83	1.472
	General Music, Other	2	4.00	.000
	Choir, Band/Orchestra	2	3.50	.707
	Choir, Other	1	3.00	.
	Total	147	3.66	.625

Q2.10 Playing Copland's "Fanfare for the	General Music	33	3.52	.795
Common Man" while a classroom ...	Choir	11	3.09	1.044
	Band/Orchestra	33	3.39	.788
	Other	1	4.00	.
	General Music, Choir	30	3.47	.776
	General Music, Choir, Other	10	3.40	.699
	General Music, Band/Orchestra	14	3.50	.519
	General Music, Band/Orchestra, Other	1	3.00	.
	Band/Orchestra, Other	2	3.50	.707
	Choir, Band/Orchestra, Other	1	4.00	.
	General Music, Choir, Band/Orchestra	6	2.33	1.211
	General Music, Other	2	3.50	.707
	Choir, Band/Orchestra	2	4.00	.000
	Choir, Other	1	4.00	.
	Total	147	3.40	.808

Q3.2 I feel it is important for students to experience integrated arts curricula.	General Music	33	3.33	.692
	Choir	11	3.73	.467
	Band/Orchestra	33	3.39	.704
	Other	1	4.00	.
	General Music, Choir	30	3.47	.681
	General Music, Choir, Other	10	3.80	.422
	General Music, Band/Orchestra	14	3.64	.497
	General Music, Band/Orchestra, Other	1	4.00	.
	Band/Orchestra, Other	2	3.00	.000
	Choir, Band/Orchestra, Other	1	3.00	.
	General Music, Choir, Band/Orchestra	6	2.83	1.472
	General Music, Other	2	3.50	.707
	Choir, Band/Orchestra	2	3.50	.707
	Choir, Other	1	4.00	.
	Total	147	3.46	.695

Q3.3 I am confident in my ability to integrate music with other arts subjects ...	General Music	33	3.30	.684
	Choir	11	3.64	.505
	Band/Orchestra	33	2.97	1.045
	Other	1	4.00	.
	General Music, Choir	30	3.33	.802
	General Music, Choir, Other	10	3.40	.516
	General Music, Band/Orchestra	14	3.43	.646
	General Music, Band/Orchestra, Other	1	3.00	.
	Band/Orchestra, Other	2	3.00	.000
	Choir, Band/Orchestra, Other	1	3.00	.
	General Music, Choir, Band/Orchestra	6	2.67	1.366
	General Music, Other	2	3.50	.707
	Choir, Band/Orchestra	2	3.50	.707
	Choir, Other	1	3.00	.
	Total	147	3.25	.818

Q3.4 I am confident in my ability to integrate music with non-arts subjects ...	General Music	33	3.06	.933
	Choir	11	3.09	.944
	Band/Orchestra	33	3.15	.906
	Other	1	4.00	.
	General Music, Choir	30	3.07	.980
	General Music, Choir, Other	10	3.40	.699
	General Music, Band/Orchestra	14	3.43	.646
	General Music, Band/Orchestra, Other	1	3.00	.
	Band/Orchestra, Other	2	3.00	.000
	Choir, Band/Orchestra, Other	1	2.00	.
	General Music, Choir, Band/Orchestra	6	3.67	.516
	General Music, Other	2	3.00	.000
	Choir, Band/Orchestra	2	3.00	.000
	Choir, Other	1	2.00	.
	Total	147	3.16	.866

Q3.5 I enjoy helping students make connections across disciplines.	General Music	33	3.24	.830
	Choir	11	3.73	.467
	Band/Orchestra	33	3.52	.667
	Other	1	4.00	.
	General Music, Choir	30	3.63	.615
	General Music, Choir, Other	10	3.70	.483
	General Music, Band/Orchestra	14	3.93	.267
	General Music, Band/Orchestra, Other	1	3.00	.
	Band/Orchestra, Other	2	3.00	.000
	Choir, Band/Orchestra, Other	1	4.00	.
	General Music, Choir, Band/Orchestra	6	2.83	1.472
	General Music, Other	2	4.00	.000
	Choir, Band/Orchestra	2	4.00	.000
	Choir, Other	1	4.00	.
	Total	147	3.53	.715

Q3.6 I feel it is important for each subject included in an integrated unit ...	General Music	33	2.64	.994
	Choir	11	3.45	.820
	Band/Orchestra	33	2.76	.969
	Other	1	4.00	.
	General Music, Choir	30	2.73	.907
	General Music, Choir, Other	10	2.80	.789
	General Music, Band/Orchestra	14	2.71	.994
	General Music, Band/Orchestra, Other	1	3.00	.
	Band/Orchestra, Other	2	3.00	.000
	Choir, Band/Orchestra, Other	1	2.00	.
	General Music, Choir, Band/Orchestra	6	2.17	.983
	General Music, Other	2	3.50	.707
	Choir, Band/Orchestra	2	4.00	.000
	Choir, Other	1	2.00	.
	Total	147	2.78	.947

Q3.7 In general, my school is supportive of integrated teaching involving the arts.	General Music	33	2.88	.893
	Choir	11	3.64	.505
	Band/Orchestra	33	2.88	.781
	Other	1	4.00	.
	General Music, Choir	30	3.50	.630
	General Music, Choir, Other	10	3.50	.527
	General Music, Band/Orchestra	14	3.14	.663
	General Music, Band/Orchestra, Other	1	2.00	.
	Band/Orchestra, Other	2	3.00	.000
	Choir, Band/Orchestra, Other	1	1.00	.
	General Music, Choir, Band/Orchestra	6	2.00	1.265
	General Music, Other	2	3.00	.000
	Choir, Band/Orchestra	2	2.00	.000
	Choir, Other	1	4.00	.
	Total	147	3.08	.848

Q3.8 I am free to use integrated teaching strategies as I see fit.	General Music	33	3.55	.617
	Choir	11	3.73	.467
	Band/Orchestra	33	3.58	.792
	Other	1	3.00	.
	General Music, Choir	30	3.77	.504
	General Music, Choir, Other	10	3.90	.316
	General Music, Band/Orchestra	14	3.50	.519
	General Music, Band/Orchestra, Other	1	3.00	.
	Band/Orchestra, Other	2	3.50	.707
	Choir, Band/Orchestra, Other	1	4.00	.
	General Music, Choir, Band/Orchestra	6	3.17	.753
	General Music, Other	2	4.00	.000
	Choir, Band/Orchestra	2	4.00	.000
	Choir, Other	1	4.00	.
	Total	147	3.63	.611

Q3.9 Teacher collaboration is an important component of teaching integrated lessons.	General Music	33	3.36	.962
	Choir	11	3.55	.522
	Band/Orchestra	33	3.64	.603
	Other	1	4.00	.
	General Music, Choir	30	3.70	.466
	General Music, Choir, Other	10	3.50	.527
	General Music, Band/Orchestra	14	3.64	.497
	General Music, Band/Orchestra, Other	1	3.00	.
	Band/Orchestra, Other	2	3.50	.707
	Choir, Band/Orchestra, Other	1	4.00	.
	General Music, Choir, Band/Orchestra	6	2.67	1.366
	General Music, Other	2	3.50	.707
	Choir, Band/Orchestra	2	4.00	.000
	Choir, Other	1	3.00	.
	Total	147	3.53	.715

Q3.10 Self-directed planning time during the school day is a vital component ...	General Music	33	3.67	.595
	Choir	11	3.82	.405
	Band/Orchestra	33	3.61	.747
	Other	1	4.00	.
	General Music, Choir	30	3.63	.615
	General Music, Choir, Other	10	3.50	.707
	General Music, Band/Orchestra	14	3.29	.611
	General Music, Band/Orchestra, Other	1	4.00	.
	Band/Orchestra, Other	2	3.50	.707
	Choir, Band/Orchestra, Other	1	2.00	.
	General Music, Choir, Band/Orchestra	6	3.33	.816
	General Music, Other	2	4.00	.000
	Choir, Band/Orchestra	2	4.00	.000
	Choir, Other	1	2.00	.
	Total	147	3.59	.660

Q3.11 I feel constrained by curricular integrated teaching.	General Music	33	2.33	1.021
	Choir	11	2.27	1.104
	Band/Orchestra	33	2.00	1.000
	Other	1	1.00	.
	General Music, Choir	30	2.13	.900
	General Music, Choir, Other	10	2.40	1.174
	General Music, Band/Orchestra	14	2.64	.929
	General Music, Band/Orchestra, Other	1	3.00	.
	Band/Orchestra, Other	2	3.00	1.414
	Choir, Band/Orchestra, Other	1	1.00	.
	General Music, Choir, Band/Orchestra	6	1.83	.983
	General Music, Other	2	2.00	.000
	Choir, Band/Orchestra	2	2.50	.707
	Choir, Other	1	2.00	.
	Total	147	2.22	.990

Q3.12 I feel that I don't have enough time to incorporate integrated teaching.	General Music	33	3.03	.810
	Choir	11	2.73	1.104
	Band/Orchestra	33	2.82	1.014
	Other	1	1.00	.
	General Music, Choir	30	2.87	.819
	General Music, Choir, Other	10	2.70	.823
	General Music, Band/Orchestra	14	2.86	1.027
	General Music, Band/Orchestra, Other	1	3.00	.
	Band/Orchestra, Other	2	3.50	.707
	Choir, Band/Orchestra, Other	1	4.00	.
	General Music, Choir, Band/Orchestra	6	1.83	.753
	General Music, Other	2	2.00	.000
	Choir, Band/Orchestra	2	3.00	.000
	Choir, Other	1	4.00	.
	Total	147	2.83	.924

Q4.2 I have had appropriate training related	General Music	33	2.12	.960
to integrating other subjects	Choir	11	2.09	1.136
	Band/Orchestra	33	1.82	.983
	Other	1	2.00	.
	General Music, Choir	30	1.87	.776
	General Music, Choir, Other	10	2.40	1.350
	General Music, Band/Orchestra	14	2.36	.497
	General Music, Band/Orchestra, Other	1	2.00	.
	Band/Orchestra, Other	2	2.00	1.414
	Choir, Band/Orchestra, Other	1	1.00	.
	General Music, Choir, Band/Orchestra	6	1.50	.837
	General Music, Other	2	2.00	1.414
	Choir, Band/Orchestra	2	1.50	.707
	Choir, Other	1	1.00	.
	Total	147	1.99	.936

Q4.3 I have had in-service professional development training related to integrated...	General Music	33	2.03	1.045
	Choir	11	1.55	.820
	Band/Orchestra	33	1.76	1.091
	Other	1	2.00	.
	General Music, Choir	30	1.87	.937
	General Music, Choir, Other	10	1.90	.876
	General Music, Band/Orchestra	14	2.36	.842
	General Music, Band/Orchestra, Other	1	2.00	.
	Band/Orchestra, Other	2	2.00	1.414
	Choir, Band/Orchestra, Other	1	1.00	.
	General Music, Choir, Band/Orchestra	6	1.50	.837
	General Music, Other	2	2.00	1.414
	Choir, Band/Orchestra	2	1.00	.000
	Choir, Other	1	1.00	.
	Total	147	1.87	.974

Q4.4 I have taken one or more arts courses on integrating subjects for college credit.	General Music	33	1.36	.783
	Choir	11	1.55	.934
	Band/Orchestra	33	1.39	.864
	Other	1	2.00	.
	General Music, Choir	30	1.63	.928
	General Music, Choir, Other	10	2.10	1.287
	General Music, Band/Orchestra	14	1.57	.852
	General Music, Band/Orchestra, Other	1	1.00	.
	Band/Orchestra, Other	2	1.50	.707
	Choir, Band/Orchestra, Other	1	1.00	.
	General Music, Choir, Band/Orchestra	6	1.67	.816
	General Music, Other	2	2.50	2.121
	Choir, Band/Orchestra	2	1.00	.000
	Choir, Other	1	1.00	.
	Total	147	1.53	.901

Q4.5 I have gained helpful information from the professional development courses	General Music	33	2.42	1.062
	Choir	11	1.55	.934
...				
	Band/Orchestra	33	2.21	1.083
	Other	1	3.00	.
	General Music, Choir	30	2.47	1.106
	General Music, Choir, Other	10	2.30	1.160
	General Music, Band/Orchestra	14	2.14	1.027
	General Music, Band/Orchestra, Other	1	1.00	.
	Band/Orchestra, Other	2	2.50	.707
	Choir, Band/Orchestra, Other	1	3.00	.
	General Music, Choir, Band/Orchestra	6	1.67	.816
	General Music, Other	2	2.50	2.121
	Choir, Band/Orchestra	2	1.50	.707
	Choir, Other	1	1.00	.
	Total	147	2.23	1.073

Q4.6 The information presented was built upon connections among disciplines ...	General Music	33	2.24	1.032
	Choir	11	1.55	.934
	Band/Orchestra	33	2.00	1.000
	Other	1	3.00	.
	General Music, Choir	30	2.37	1.098
	General Music, Choir, Other	10	2.40	1.075
	General Music, Band/Orchestra	14	2.21	1.122
	General Music, Band/Orchestra, Other	1	1.00	.
	Band/Orchestra, Other	2	2.50	.707
	Choir, Band/Orchestra, Other	1	2.00	.
	General Music, Choir, Band/Orchestra	6	1.67	.816
	General Music, Other	2	2.50	2.121
	Choir, Band/Orchestra	2	1.50	.707
	Choir, Other	1	2.00	.
	Total	147	2.14	1.038

Q4.7 The professional development	General Music	33	2.24	1.091
challenged me to foster my imagination	Choir	11	1.91	1.044
	Band/Orchestra	33	2.06	1.059
	Other	1	3.00	.
	General Music, Choir	30	2.37	1.033
	General Music, Choir, Other	10	2.10	.994
	General Music, Band/Orchestra	14	2.14	1.167
	General Music, Band/Orchestra, Other	1	1.00	.
	Band/Orchestra, Other	2	2.00	1.414
	Choir, Band/Orchestra, Other	1	3.00	.
	General Music, Choir, Band/Orchestra	6	1.50	.548
	General Music, Other	2	2.50	2.121
	Choir, Band/Orchestra	2	1.50	.707
	Choir, Other	1	2.00	.
	Total	147	2.14	1.047

Q4.8 The information I received was adaptable to my teaching environment.	General Music	33	2.27	.944
	Choir	11	1.73	.905
	Band/Orchestra	33	2.15	1.004
	Other	1	3.00	.
	General Music, Choir	30	2.60	.968
	General Music, Choir, Other	10	2.20	1.033
	General Music, Band/Orchestra	14	2.21	.893
	General Music, Band/Orchestra, Other	1	2.00	.
	Band/Orchestra, Other	2	2.50	.707
	Choir, Band/Orchestra, Other	1	3.00	.
	General Music, Choir, Band/Orchestra	6	1.67	.816
	General Music, Other	2	2.50	2.121
	Choir, Band/Orchestra	2	1.50	.707
	Choir, Other	1	2.00	.
	Total	147	2.24	.968

Q4.9 I have conducted professional development sessions related to interdisciplinary ...	General Music	33	1.70	1.212
	Choir	11	1.82	1.079
	Band/Orchestra	33	1.67	1.164
	Other	1	1.00	.
	General Music, Choir	30	1.50	.900
	General Music, Choir, Other	10	1.70	.949
	General Music, Band/Orchestra	14	1.64	.745
	General Music, Band/Orchestra, Other	1	1.00	.
	Band/Orchestra, Other	2	2.00	1.414
	Choir, Band/Orchestra, Other	1	1.00	.
	General Music, Choir, Band/Orchestra	6	1.67	1.033
	General Music, Other	2	1.00	.000
	Choir, Band/Orchestra	2	1.00	.000
	Choir, Other	1	1.00	.
	Total	147	1.62	1.023

Groups Statistics from All Questions Comparing Gender State

Survey Question	School Level Taught	N	Mean	SD
Q2.2 Using music to teach multiplication facts ...	Male	63	2.84	.971
	Female	84	2.93	1.027
	Total	147	2.89	1.001
Q2.3 Singing a song about earth day ...	Male	63	3.05	.906
	Female	84	2.99	.885
	Total	147	3.01	.891
Q2.4 Exploring a blues song to examine its musical elements...	Male	63	3.62	.658
	Female	84	3.93	.259
	Total	147	3.80	.496

Q2.5 Comparing the painting, “Mother and Child”	Male	63	3.48	.715
by Picasso with the Spanish song ...	Female	84	3.75	.535
	Total	147	3.63	.631
Q2.6 Marching in place and playing rhythm sticks	Male	63	2.81	1.030
while singing the song ...	Female	84	2.88	1.176
	Total	147	2.85	1.113
Q2.7 Presenting musical instruments of the	Male	63	3.46	.737
Ancient Silk Road in general music ...	Female	84	3.71	.550
	Total	147	3.61	.647
Q2.8 Playing instruments while singing a song to	Male	63	2.97	.950
memorize the order of the planets	Female	84	2.93	1.050
	Total	147	2.95	1.005

Q2.9 Examining and comparing the ritual “This	Male	63	3.48	.780
Train is Bound for Glory”	Female	84	3.80	.433
	Total	147	3.66	.625
Q2.10 Playing Copland's "Fanfare for the	Male	63	3.25	.897
Common Man" while a classroom ...	Female	84	3.51	.720
	Total	147	3.40	.808
Q3.2 I feel it is important for students to	Male	63	3.40	.752
experience integrated arts curricula.	Female	84	3.50	.649
	Total	147	3.46	.695
Q3.3 I am confident in my ability to integrate	Male	63	3.05	.888
music with other arts subjects ...	Female	84	3.40	.730
	Total	147	3.25	.818

Q3.4 I am confident in my ability to integrate	Male	63	3.10	.777
music with non-arts subjects ...	Female	84	3.20	.929
	Total	147	3.16	.866
Q3.5 I enjoy helping students make connections	Male	63	3.49	.738
across disciplines.	Female	84	3.56	.700
	Total	147	3.53	.715
Q3.6 I feel it is important for each subject	Male	63	2.63	.972
included in an integrated unit ...	Female	84	2.89	.919
	Total	147	2.78	.947
Q3.7 In general, my school is supportive of	Male	63	3.00	.803
integrated teaching involving the arts.	Female	84	3.14	.880
	Total	147	3.08	.848

Q3.8 I am free to use integrated teaching strategies as I see fit.	Male	28	3.61	.685
	Female	42	3.76	.431
	Total	70	3.70	.548
Q3.9 Teacher collaboration is an important component of teaching integrated lessons.	Male	63	3.52	.692
	Female	84	3.70	.533
	Total	147	3.63	.611
Q3.10 Self-directed planning time during the school day is an important component ...	Male	63	3.41	.710
	Female	84	3.71	.593
	Total	147	3.59	.660
Q3.11 I feel constrained by curricular integrated teaching.	Male	63	2.14	.931
	Female	84	2.27	1.034
	Total	147	2.22	.990

Q3.12 I feel that I don't have enough time to incorporate integrated teaching.	Male	63	2.73	.937
	Female	84	2.90	.913
	Total	147	2.83	.924
Q4.2 I have had appropriate training related to integrating other subjects	Male	63	1.84	.787
	Female	84	2.10	1.025
	Total	147	1.99	.936
Q4.3 I have had in-service professional development training related to integrated ...	Male	63	1.89	.952
	Female	84	1.86	.996
	Total	147	1.87	.974
Q4.4 I have taken one or more arts courses on integrating subjects for college credit.	Male	63	1.48	.820
	Female	84	1.57	.960
	Total	147	1.53	.901

Q4.5 I have gained helpful information from the professional development courses ...	Male	63	2.14	.998
	Female	84	2.30	1.128
	Total	147	2.23	1.073
Q4.6 The information presented was built upon connections among disciplines ...	Male	63	2.03	.950
	Female	84	2.21	1.098
	Total	147	2.14	1.038
Q4.7 The professional development challenged me to foster my imagination ...	Male	63	2.10	.995
	Female	84	2.18	1.088
	Total	147	2.14	1.047
Q4.8 The information I received was adaptable to my teaching environment.	Male	63	2.24	.911
	Female	84	2.24	1.013
	Total	147	2.24	.968

Q4.9 I have conducted professional development	Male	63	1.57	.928
sessions related to interdisciplinary ...	Female	84	1.65	1.092
	Total	147	1.62	1.023

APPENDIX - Groups Statistics from All Questions Comparing Years of Experience

Survey Question	Subject Taught	<i>N</i>	<i>M</i>	<i>SD</i>
Q2.2 Using music to teach multiplication facts ...	0-5 Years of Experience	23	2.65	1.152
	6-10 Years of Experience	23	3.00	1.044
	11-15 Years of Experience	23	3.09	.949
	16-20 Years of Experience	17	2.71	.772
	21-25 Years of Experience	24	2.96	.999
	26-30 Years of Experience	18	3.11	.832
	More than 30 Years of Experience	19	2.68	1.157
	Total	147	2.89	1.001

Q2.3 Singing a song about earth day ...	0-5 Years of Experience	23	2.96	.928
	6-10 Years of Experience	23	2.87	.920
	11-15 Years of Experience	23	3.17	.887
	16-20 Years of Experience	17	2.88	.781
	21-25 Years of Experience	24	3.17	.917
	26-30 Years of Experience	18	3.22	.732
	More than 30 Years of Experience	19	2.79	1.032
	Total	147	3.01	.891

Q2.4 Exploring a blues song to examine its musical elements...	0-5 Years of Experience	23	3.96	.209
	6-10 Years of Experience	23	3.61	.891
	11-15 Years of Experience	23	3.74	.449
	16-20 Years of Experience	17	3.76	.437
	21-25 Years of Experience	24	3.88	.338
	26-30 Years of Experience	18	3.72	.461
	More than 30 Years of Experience	19	3.89	.315
	Total	147	3.80	.496

Q2.5 Comparing the painting, “Mother and Child” by Picasso with the Spanish song ...	0-5 Years of Experience	23	3.74	.449
	6-10 Years of Experience	23	3.70	.876
	11-15 Years of Experience	23	3.57	.590
	16-20 Years of Experience	17	3.65	.493
	21-25 Years of Experience	24	3.58	.654
	26-30 Years of Experience	18	3.33	.767
	More than 30 Years of Experience	19	3.84	.375
	Total	147	3.63	.631

Q2.6 Marching in place and playing rhythm	0-5 Years of Experience	23	3.26	1.096
sticks while singing the song ...	6-10 Years of Experience	23	2.96	1.147
	11-15 Years of Experience	23	2.57	1.121
	16-20 Years of Experience	17	2.82	1.074
	21-25 Years of Experience	24	2.79	1.021
	26-30 Years of Experience	18	2.67	1.085
	More than 30 Years of Experience	19	2.84	1.259
	Total	147	2.85	1.113

Q2.7 Presenting musical instruments of the Ancient Silk Road in general music ...	0-5 Years of Experience	23	3.61	.656
	6-10 Years of Experience	23	3.65	.885
	11-15 Years of Experience	23	3.74	.449
	16-20 Years of Experience	17	3.53	.624
	21-25 Years of Experience	24	3.75	.442
	26-30 Years of Experience	18	3.33	.686
	More than 30 Years of Experience	19	3.53	.697
	Total	147	3.61	.647

Q2.8 Playing instruments while singing a song to memorize the order of the planets	0-5 Years of Experience	23	2.87	1.058
	6-10 Years of Experience	23	2.83	1.072
	11-15 Years of Experience	23	3.17	.834
	16-20 Years of Experience	17	2.82	1.131
	21-25 Years of Experience	24	3.04	.908
	26-30 Years of Experience	18	3.17	.857
	More than 30 Years of Experience	19	2.68	1.204
	Total	147	2.95	1.005

Q2.9 Examining and comparing the ritual	0-5 Years of Experience	23	3.61	.583
“This Train is Bound for Glory”	6-10 Years of Experience	23	3.52	.947
	11-15 Years of Experience	23	3.65	.647
	16-20 Years of Experience	17	3.82	.529
	21-25 Years of Experience	24	3.75	.442
	26-30 Years of Experience	18	3.50	.618
	More than 30 Years of Experience	19	3.79	.419
	Total	147	3.66	.625

Q2.10 Playing Copland's "Fanfare for the Common Man" while a classroom ...	0-5 Years of Experience	23	3.48	.846
	6-10 Years of Experience	23	3.13	1.058
	11-15 Years of Experience	23	3.39	.839
	16-20 Years of Experience	17	3.41	.870
	21-25 Years of Experience	24	3.58	.504
	26-30 Years of Experience	18	3.17	.857
	More than 30 Years of Experience	19	3.63	.496
Total		147	3.40	.808

Q3.2 I feel it is important for students to experience integrated arts curricula.	0-5 Years of Experience	23	3.22	.736
	6-10 Years of Experience	23	3.52	.898
	11-15 Years of Experience	23	3.61	.499
	16-20 Years of Experience	17	3.59	.507
	21-25 Years of Experience	24	3.33	.702
	26-30 Years of Experience	18	3.33	.767
	More than 30 Years of Experience	19	3.63	.597
	Total	147	3.46	.695

Q3.3 I am confident in my ability to integrate music with other arts subjects ...	0-5 Years of Experience	23	2.96	.767
	6-10 Years of Experience	23	3.35	.935
	11-15 Years of Experience	23	3.22	.850
	16-20 Years of Experience	17	3.12	.697
	21-25 Years of Experience	24	3.46	.884
	26-30 Years of Experience	18	3.17	.857
	More than 30 Years of Experience	19	3.47	.612
	Total	147	3.25	.818

Q3.4 I am confident in my ability to integrate music with non-arts subjects ...	0-5 Years of Experience	23	2.61	.783
	6-10 Years of Experience	23	3.09	.793
	11-15 Years of Experience	23	3.26	.964
	16-20 Years of Experience	17	2.82	.809
	21-25 Years of Experience	24	3.42	.830
	26-30 Years of Experience	18	3.28	.752
	More than 30 Years of Experience	19	3.63	.761
	Total	147	3.16	.866

Q3.5 I enjoy helping students make connections across disciplines.	0-5 Years of Experience	23	3.35	.775
	6-10 Years of Experience	23	3.48	.898
	11-15 Years of Experience	23	3.65	.573
	16-20 Years of Experience	17	3.53	.717
	21-25 Years of Experience	24	3.67	.482
	26-30 Years of Experience	18	3.28	.958
	More than 30 Years of Experience	19	3.74	.452
	Total	23	3.35	.775

Q3.6 I feel it is important for each subject included in an integrated unit ...	0-5 Years of Experience	23	2.57	1.037
	6-10 Years of Experience	23	2.78	.998
	11-15 Years of Experience	23	2.65	.935
	16-20 Years of Experience	17	3.12	.857
	21-25 Years of Experience	24	2.83	.917
	26-30 Years of Experience	18	2.72	1.018
	More than 30 Years of Experience	19	2.89	.875
	Total	147	2.78	.947

Q3.7 In general, my school is supportive of integrated teaching involving the arts.	0-5 Years of Experience	23	3.00	.739
	6-10 Years of Experience	23	3.00	1.087
	11-15 Years of Experience	23	3.09	.793
	16-20 Years of Experience	17	3.06	.748
	21-25 Years of Experience	24	3.25	.737
	26-30 Years of Experience	18	3.06	1.056
	More than 30 Years of Experience	19	3.11	.809
	Total	147	3.08	.848

Q3.8 I am free to use integrated teaching strategies as I see fit.	0-5 Years of Experience	23	3.52	.665
	6-10 Years of Experience	23	3.61	.583
	11-15 Years of Experience	23	3.78	.422
	16-20 Years of Experience	17	3.59	.507
	21-25 Years of Experience	24	3.58	.881
	26-30 Years of Experience	18	3.67	.485
	More than 30 Years of Experience	19	3.63	.597
	Total	147	3.63	.611

Q3.9 Teacher collaboration is an important component of teaching integrated lessons.	0-5 Years of Experience	23	3.65	.487
	6-10 Years of Experience	23	3.52	.898
	11-15 Years of Experience	23	3.39	.656
	16-20 Years of Experience	17	3.88	.332
	21-25 Years of Experience	24	3.50	.834
	26-30 Years of Experience	18	3.17	.924
	More than 30 Years of Experience	19	3.63	.496
	Total	147	3.53	.715

Q3.10 Self-directed planning time during the school day is an important component ...	0-5 Years of Experience	23	3.65	.647
	6-10 Years of Experience	23	3.70	.635
	11-15 Years of Experience	23	3.35	.935
	16-20 Years of Experience	17	3.71	.470
	21-25 Years of Experience	24	3.38	.711
	26-30 Years of Experience	18	3.50	.514
	More than 30 Years of Experience	19	3.89	.315
	Total	147	3.59	.660

Q3.11 I feel constrained by curricular integrated teaching.	0-5 Years of Experience	23	2.17	.834
	6-10 Years of Experience	23	2.26	.915
	11-15 Years of Experience	23	1.96	.976
	16-20 Years of Experience	17	1.82	.728
	21-25 Years of Experience	24	2.33	1.007
	26-30 Years of Experience	18	2.56	1.042
	More than 30 Years of Experience	19	2.42	1.305
	Total	147	2.22	.990

Q3.12 I feel that I don't have enough time to incorporate integrated teaching.	0-5 Years of Experience	23	3.09	.949
	6-10 Years of Experience	23	2.96	1.022
	11-15 Years of Experience	23	2.61	1.118
	16-20 Years of Experience	17	2.71	.686
	21-25 Years of Experience	24	2.88	.741
	26-30 Years of Experience	18	2.78	.878
	More than 30 Years of Experience	19	2.74	.991
	Total	147	2.83	.924

Q4.2 I have had appropriate training related to integrating other subjects	0-5 Years of Experience	23	1.65	.775
	6-10 Years of Experience	23	1.74	1.054
	11-15 Years of Experience	23	2.30	1.020
	16-20 Years of Experience	17	1.71	.588
	21-25 Years of Experience	24	2.13	.992
	26-30 Years of Experience	18	2.50	.618
	More than 30 Years of Experience	19	1.89	1.049
	Total	147	1.99	.936

Q4.3 I have had in-service professional development training related to integrated...	0-5 Years of Experience	23	1.74	.964
	6-10 Years of Experience	23	1.65	.885
	11-15 Years of Experience	23	1.96	1.065
	16-20 Years of Experience	17	1.65	.702
	21-25 Years of Experience	24	2.00	1.063
	26-30 Years of Experience	18	2.22	.808
	More than 30 Years of Experience	19	1.89	1.197
	Total	147	1.87	.974

Q4.4 I have taken one or more arts courses on integrating subjects for college credit.	0-5 Years of Experience	23	1.35	.487
	6-10 Years of Experience	23	1.74	1.137
	11-15 Years of Experience	23	1.43	.728
	16-20 Years of Experience	17	1.53	.874
	21-25 Years of Experience	24	1.54	1.062
	26-30 Years of Experience	18	1.56	.984
	More than 30 Years of Experience	19	1.58	.961
	Total	147	1.53	.901

Q4.5 I have gained helpful information from the professional development courses ...	0-5 Years of Experience	23	2.22	.998
	6-10 Years of Experience	23	1.96	1.065
	11-15 Years of Experience	23	2.61	1.076
	16-20 Years of Experience	17	2.29	1.160
	21-25 Years of Experience	24	2.21	1.021
	26-30 Years of Experience	18	2.17	.985
	More than 30 Years of Experience	19	2.16	1.259
	Total	147	2.23	1.073

Q4.6 The information presented was built upon connections among disciplines ...	0-5 Years of Experience	23	1.87	.815
	6-10 Years of Experience	23	1.87	1.014
	11-15 Years of Experience	23	2.48	1.039
	16-20 Years of Experience	17	1.94	.899
	21-25 Years of Experience	24	2.29	1.122
	26-30 Years of Experience	18	2.22	1.003
	More than 30 Years of Experience	19	2.26	1.284
	Total	147	2.14	1.038

Q4.7 The professional development challenged me to foster my imagination ...	0-5 Years of Experience	23	2.00	.953
	6-10 Years of Experience	23	1.91	.900
	11-15 Years of Experience	23	2.39	1.118
	16-20 Years of Experience	17	2.06	.966
	21-25 Years of Experience	24	2.21	1.141
	26-30 Years of Experience	18	2.28	1.018
	More than 30 Years of Experience	19	2.16	1.259
	Total	147	2.14	1.047

Q4.8 The information I received was adaptable to my teaching environment.	0-5 Years of Experience	23	2.13	.815
	6-10 Years of Experience	23	2.22	.998
	11-15 Years of Experience	23	2.35	1.112
	16-20 Years of Experience	17	2.12	.993
	21-25 Years of Experience	24	2.38	.924
	26-30 Years of Experience	18	2.22	.878
	More than 30 Years of Experience	19	2.21	1.134
	Total	147	2.24	.968

Q4.9 I have conducted professional development sessions related to interdisciplinary ...	0-5 Years of Experience	23	1.26	.689
	6-10 Years of Experience	23	1.52	.898
	11-15 Years of Experience	23	1.65	1.112
	16-20 Years of Experience	17	2.00	1.118
	21-25 Years of Experience	24	1.75	1.260
	26-30 Years of Experience	18	1.67	.907
	More than 30 Years of Experience	19	1.58	1.071
	Total	147	1.62	1.023

State Groups Statistics from All Questions Comparing Degree Earned

Survey Question	School Level Taught	<i>N</i>	<i>Mean</i>	<i>SD</i>
Q2.2 Using music to teach multiplication facts ...	Bachelor's Degree	69	2.80	.994
	Master's Degree	69	3.06	.998
	Doctoral Degree	9	2.33	.866
	Total	147	2.89	1.001
Q2.3 Singing a song about earth day ...	Bachelor's Degree	69	2.96	.882
	Master's Degree	69	3.07	.944
	Doctoral Degree	9	3.00	.500
	Total	147	3.01	.891
Q2.4 Exploring a blues song to examine its musical elements...	Bachelor's Degree	69	3.80	.405
	Master's Degree	69	3.78	.591
	Doctoral Degree	9	3.89	.333

	Total	147	3.80	.496
Q2.5 Comparing the painting, “Mother and Child”	Bachelor’s Degree	69	3.68	.528
by Picasso with the Spanish song ...	Master’s Degree	69	3.54	.739
	Doctoral Degree	9	4.00	.000
	Total	147	3.63	.631
Q2.6 Marching in place and playing rhythm sticks	Bachelor’s Degree	69	2.81	1.128
while singing the song ...	Master’s Degree	69	2.88	1.132
	Doctoral Degree	9	2.89	.928
	Total	147	2.85	1.113
Q2.7 Presenting musical instruments of the	Bachelor’s Degree	69	3.64	.593
Ancient Silk Road in general music ...	Master’s Degree	69	3.58	.715
	Doctoral Degree	9	3.56	.527
	Total	147	3.61	.647

Q2.8 Playing instruments while singing a song to memorize the order of the planets	Bachelor's Degree	69	2.96	.977
	Master's Degree	69	3.01	1.036
	Doctoral Degree	9	2.33	.866
	Total	147	2.95	1.005
Q2.9 Examining and comparing the ritual "This Train is Bound for Glory"	Bachelor's Degree	69	3.65	.564
	Master's Degree	69	3.65	.703
	Doctoral Degree	9	3.78	.441
	Total	147	3.66	.625
Q2.10 Playing Copland's "Fanfare for the Common Man" while a classroom ...	Bachelor's Degree	69	3.59	.649
	Master's Degree	69	3.25	.914
	Doctoral Degree	9	3.11	.782
	Total	147	3.40	.808

Q3.2 I feel it is important for students to experience integrated arts curricula.	Bachelor's Degree	69	3.41	.734
	Master's Degree	69	3.52	.678
	Doctoral Degree	9	3.33	.500
	Total	147	3.46	.695
Q3.3 I am confident in my ability to integrate music with other arts subjects ...	Bachelor's Degree	69	3.20	.815
	Master's Degree	69	3.29	.842
	Doctoral Degree	9	3.33	.707
	Total	147	3.25	.818
Q3.4 I am confident in my ability to integrate music with non-arts subjects ...	Bachelor's Degree	69	3.04	.865
	Master's Degree	69	3.26	.885
	Doctoral Degree	9	3.22	.667
	Total	147	3.16	.866

Q3.5 I enjoy helping students make connections across disciplines.	Bachelor's Degree	69	3.48	.720
	Master's Degree	69	3.57	.737
	Doctoral Degree	9	3.67	.500
	Total	147	3.53	.715
Q3.6 I feel it is important for each subject included in an integrated unit ...	Bachelor's Degree	69	2.70	.912
	Master's Degree	69	2.86	1.019
	Doctoral Degree	9	2.89	.601
	Total	147	2.78	.947
Q3.7 In general, my school is supportive of integrated teaching involving the arts.	Bachelor's Degree	69	3.09	.818
	Master's Degree	69	3.10	.877
	Doctoral Degree	9	2.89	.928
	Total	147	3.08	.848

Q3.8 I am free to use integrated teaching strategies as I see fit.	Bachelor's Degree	69	3.57	.696
	Master's Degree	69	3.71	.488
	Doctoral Degree	9	3.44	.726
	Total	147	3.63	.611
Q3.9 Teacher collaboration is an important component of teaching integrated lessons.	Bachelor's Degree	69	3.57	.581
	Master's Degree	69	3.48	.851
	Doctoral Degree	9	3.67	.500
	Total	147	3.53	.715
Q3.10 Self-directed planning time during the school day is an important component ...	Bachelor's Degree	69	3.51	.699
	Master's Degree	69	3.64	.641
	Doctoral Degree	9	3.78	.441
	Total	147	3.59	.660

Q3.11 I feel constrained by curricular integrated teaching.	Bachelor's Degree	69	2.30	.944
	Master's Degree	69	2.14	1.033
	Doctoral Degree	9	2.11	1.054
	Total	147	2.22	.990
Q3.12 I feel that I don't have enough time to incorporate integrated teaching.	Bachelor's Degree	69	2.88	.900
	Master's Degree	69	2.80	.979
	Doctoral Degree	9	2.67	.707
	Total	147	2.83	.924
Q4.2 I have had appropriate training related to integrating other subjects	Bachelor's Degree	69	1.91	.981
	Master's Degree	69	2.07	.896
	Doctoral Degree	9	1.89	.928
	Total	147	1.99	.936

Q4.3 I have had in-service professional development training related to integrated...	Bachelor's Degree	69	1.77	.860
	Master's Degree	69	2.00	1.071
	Doctoral Degree	9	1.67	1.000
	Total	147	1.87	.974
Q4.4 I have taken one or more arts courses on integrating subjects for college credit.	Bachelor's Degree	69	1.41	.714
	Master's Degree	69	1.61	1.018
	Doctoral Degree	9	1.89	1.167
	Total	147	1.53	.901
Q4.5 I have gained helpful information from the professional development courses ...	Bachelor's Degree	69	2.09	.981
	Master's Degree	69	2.41	1.142
	Doctoral Degree	9	2.00	1.118
	Total	147	2.23	1.073

Q4.6 The information presented was built upon connections among disciplines ...	Bachelor's Degree	69	1.94	.938
	Master's Degree	69	2.36	1.098
	Doctoral Degree	9	1.89	1.054
	Total	147	2.14	1.038
Q4.7 The professional development challenged me to foster my imagination ...	Bachelor's Degree	69	1.99	.962
	Master's Degree	69	2.35	1.096
	Doctoral Degree	9	1.78	1.093
	Total	147	2.14	1.047
Q4.8 The information I received was adaptable to my teaching environment.	Bachelor's Degree	69	2.03	.891
	Master's Degree	69	2.46	.994
	Doctoral Degree	9	2.11	1.054
	Total	147	2.24	.968

Q4.9 I have conducted professional development sessions related to interdisciplinary ...	Bachelor's Degree	69	1.38	.788
	Master's Degree	69	1.83	1.175
	Doctoral Degree	9	1.89	1.054
	Total	147	1.62	1.023

State Two Way ANOVA SUBJECT LEVEL

	<i>Source</i>	<i>Type III Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>	<i>Partial Eta Squared</i>	<i>Noncent. Parameter</i>	<i>Observed Power^b</i>
Q2.2 Using	Corrected Model	35.498 ^a	33	1.076	1.097	.350	.243	36.215	.879
music to teach	Intercept	138.058	1	138.058	140.849	.000	.555	140.849	1.000
multiplication	Subject	11.055	13	.850	.868	.589	.091	11.278	.501
facts ...	Level Taught	5.963	5	1.193	1.217	.306	.051	6.083	.419
	Subject * Level	8.779	15	.585	.597	.872	.073	8.957	.365
	Error	110.761	113	.980					
	Total	800.000	147						
	Corrected Total	146.259	146						

a. R Squared = .243 (Adjusted R Squared = .022)

b. Computed using alpha = .05

		<i>Type III Sum</i>		<i>Mean</i>			<i>Partial</i>	<i>Noncent.</i>	<i>Observed</i>
		<i>of Squares</i>	<i>df</i>	<i>Square</i>	<i>F</i>	<i>Sig.</i>	<i>Squared</i>	<i>Parameter</i>	<i>Power^b</i>
Q2.3 Singing a song about earth day ...	Corrected Model	44.308 ^a	33	1.343	2.117	.002	.382	69.864	.998
	Intercept	113.030	1	113.030	178.224	.000	.612	178.224	1.000
	Subject	5.204	13	.400	.631	.823	.068	8.206	.360
	Level Taught	4.195	5	.839	1.323	.259	.055	6.615	.454
	Subject * Level	18.122	15	1.208	1.905	.030	.202	28.575	.928
	Error	71.665	113	.634					
	Total	696.000	147						
	Corrected Total	115.973	146						

a. R Squared = .382 (Adjusted R Squared = .202)

b. Computed using alpha = .05

		<i>Type III Sum</i>		<i>Mean</i>			<i>Partial</i>	<i>Noncent.</i>	<i>Observed</i>
<i>Source</i>		<i>of Squares</i>	<i>df</i>	<i>Square</i>	<i>F</i>	<i>Sig.</i>	<i>Squared</i>	<i>Parameter</i>	<i>Power^b</i>
Q2.4 Exploring a blues song to examine its musical elements...	Corrected Model	17.144 ^a	33	.520	3.134	.000	.478	103.413	1.000
	Intercept	40.129	1	40.129	242.059	.000	.682	242.059	1.000
	Subject	3.373	13	.259	1.565	.106	.153	20.347	.817
	Level Taught	3.149	5	.630	3.799	.003	.144	18.995	.928
	Subject * Level	6.896	15	.460	2.773	.001	.269	41.595	.991
	Error	18.733	113	.166					
	Total	249.000	147						
	Corrected Total	35.878	146						

a. R Squared = .478 (Adjusted R Squared = .325)

b. Computed using alpha = .05

		<i>Type III</i>			<i>Mean</i>		<i>Partial Eta</i>		<i>Noncent.</i>
		<i>Source</i>	<i>Sum of Squares</i>	<i>df</i>	<i>Square</i>	<i>F</i>	<i>Sig.</i>	<i>Squared</i>	<i>Parameter</i>
Q2.5 Comparing the painting, “Mother and Child” by Picasso with the Spanish ...	Corrected Model	25.204 ^a	33	.764	2.619	.000	.433	86.412	1.000
	Intercept	73.736	1	73.736	252.804	.000	.691	252.804	1.000
	Subject	5.022	13	.386	1.324	.209	.132	17.218	.731
	Level Taught	.789	5	.158	.541	.745	.023	2.707	.194
	Subject * Level	15.234	15	1.016	3.482	.000	.316	52.230	.999
	Error	32.959	113	.292					
	Total	333.000	147						
Corrected Total		58.163	146						

a. R Squared = .433 (Adjusted R Squared = .268)

b. Computed using alpha = .05

		<i>Type III Sum</i>		<i>Mean</i>			<i>Partial</i>	<i>Noncent.</i>	<i>Observed</i>
	<i>Source</i>	<i>of Squares</i>	<i>df</i>	<i>Square</i>	<i>F</i>	<i>Sig.</i>	<i>Squared</i>	<i>Parameter</i>	<i>Power^b</i>
Q2.6 Marching	Corrected Model	46.132 ^a	33	1.398	1.174	.264	.255	38.736	.906
In place and	Intercept	143.579	1	143.579	120.560	.000	.516	120.560	1.000
playing rhythm	Subject	16.756	13	1.289	1.082	.381	.111	14.070	.619
sticks while	Level Taught	8.151	5	1.630	1.369	.241	.057	6.845	.469
singing	Subject * Level	19.531	15	1.302	1.093	.371	.127	16.400	.667
the song ...	Error	134.576	113	1.191					
	Total	860.000	147						
	Corrected Total	180.707	146						

a. R Squared = .255 (Adjusted R Squared = .038)

b. Computed using alpha = .05

		<i>Type III Sum</i>		<i>Mean</i>			<i>Partial</i>	<i>Noncent.</i>	<i>Observed</i>
		<i>of Squares</i>	<i>df</i>	<i>Square</i>	<i>F</i>	<i>Sig.</i>	<i>Squared</i>	<i>Parameter</i>	<i>Power^b</i>
Q2.7 Presenting	Corrected Model	26.155 ^a	33	.793	2.562	.000	.428	84.541	1.000
musical	Intercept	76.200	1	76.200	246.296	.000	.685	246.296	1.000
instruments	Subject	6.301	13	.485	1.567	.105	.153	20.365	.818
of the Ancient	Level Taught	3.545	5	.709	2.292	.050	.092	11.458	.722
Silk Road	Subject * Level	10.987	15	.732	2.367	.005	.239	35.512	.976
in general	Error	34.960	113	.309					
music ...	Total	347.000	147						
	Corrected Total	61.116	146						

a. R Squared = .428 (Adjusted R Squared = .261)

b. Computed using alpha = .05

		<i>Type III Sum</i>		<i>Mean</i>			<i>Partial</i>	<i>Noncent.</i>	<i>Observed</i>
		<i>of Squares</i>	<i>df</i>	<i>Square</i>	<i>F</i>	<i>Sig.</i>	<i>Eta Squared</i>	<i>Parameter</i>	<i>Power^b</i>
Q2.8 Playing instruments while singing a song to memorize the order ...	Corrected Model	36.243 ^a	33	1.098	1.115	.329	.246	36.789	.886
	Intercept	125.062	1	125.062	126.947	.000	.529	126.947	1.000
	Subject	16.162	13	1.243	1.262	.247	.127	16.406	.704
	Level Taught	6.616	5	1.323	1.343	.251	.056	6.716	.460
	Subject * Level	11.365	15	.758	.769	.709	.093	11.536	.477
	Error	111.322	113	.985					
	Total	768.000	147						
Corrected Total		147.565	146						

a. R Squared = .246 (Adjusted R Squared = .025)

b. Computed using alpha = .05

		<i>Type III Sum</i>		<i>Mean</i>			<i>Partial</i>	<i>Noncent.</i>	<i>Observed</i>
<i>Source</i>		<i>of Squares</i>	<i>df</i>	<i>Square</i>	<i>F</i>	<i>Sig.</i>	<i>Squared</i>	<i>Parameter</i>	<i>Power^b</i>
Q2.9 Examining and comparing the ritual “This Train is Bound for Glory”	Corrected Model	15.377 ^a	33	.466	1.265	.182	.270	41.754	.932
	Intercept	63.017	1	63.017	171.109	.000	.602	171.109	1.000
	Subject	4.301	13	.331	.898	.557	.094	11.678	.519
	Level Taught	2.584	5	.517	1.403	.228	.058	7.016	.480
	Subject * Level	6.495	15	.433	1.176	.301	.135	17.636	.708
	Error	41.616	113	.368					
	Total	321.000	147						
Corrected Total		56.993	146						

a. R Squared = .270 (Adjusted R Squared = .057)

b. Computed using alpha = .05

		<i>Type III Sum</i>		<i>Mean</i>			<i>Partial</i>	<i>Noncent.</i>	<i>Observed</i>
<i>Source</i>		<i>of Squares</i>	<i>df</i>	<i>Square</i>	<i>F</i>	<i>Sig.</i>	<i>Squared</i>	<i>Parameter</i>	<i>Power^b</i>
Q2.10 Playing	Corrected Model	28.341 ^a	33	.859	1.449	.079	.297	47.815	.966
Copland's	Intercept	70.801	1	70.801	119.448	.000	.514	119.448	1.000
"Fanfare	Subject	8.222	13	.632	1.067	.395	.109	13.871	.611
for the	Level Taught	2.765	5	.553	.933	.462	.040	4.665	.323
Common Man"	Subject * Level	13.220	15	.881	1.487	.122	.165	22.304	.832
while a	Error	66.979	113	.593					
classroom ...	Total	471.000	147						
	Corrected Total	95.320	146						

a. R Squared = .297 (Adjusted R Squared = .092)

b. Computed using alpha = .05

		<i>Type III Sum</i>		<i>Mean</i>			<i>Partial</i>	<i>Noncent.</i>	<i>Observed</i>
<i>Source</i>		<i>of Squares</i>	<i>df</i>	<i>Square</i>	<i>F</i>	<i>Sig.</i>	<i>Squared</i>	<i>Parameter</i>	<i>Power^b</i>
Q3.2 I feel it is important for students to experience integrated arts curricula.	Corrected Model	18.724 ^a	33	.567	1.239	.203	.266	40.894	.925
	Intercept	67.139	1	67.139	146.636	.000	.565	146.636	1.000
	Subject	5.364	13	.413	.901	.554	.094	11.716	.520
	Level Taught	2.405	5	.481	1.050	.392	.044	5.252	.363
	Subject * Level	9.350	15	.623	1.361	.179	.153	20.422	.788
	Error	51.739	113	.458					
	Total	421.000	147						
Corrected Total		70.463	146						

a. R Squared = .266 (Adjusted R Squared = .051)

b. Computed using alpha = .05

		Type III Sum		Mean			Partial	Noncent.	Observed
Source		of Squares	<i>df</i>	Square	<i>F</i>	<i>Sig.</i>	Eta Squared	Parameter	Power ^b
Q3.3 I am	Corrected Model	35.562 ^a	33	1.078	1.960	.005	.364	64.683	.996
confident in	Intercept	89.665	1	89.665	163.091	.000	.591	163.091	1.000
my ability to	Subject	7.651	13	.589	1.071	.392	.110	13.917	.613
integrate music	Level Taught	6.814	5	1.363	2.479	.036	.099	12.394	.761
with non-arts	Subject * Level	13.958	15	.931	1.693	.062	.183	25.388	.888
subjects ...	Error	62.125	113	.550					
	Total	547.000	147						
	Corrected Total	97.687	146						

a. R Squared = .364 (Adjusted R Squared = .178)

b. Computed using alpha = .05

		<i>Type III Sum</i>		<i>Mean</i>			<i>Partial</i>	<i>Noncent.</i>	<i>Observed</i>
	<i>Source</i>	<i>of Squares</i>	<i>df</i>	<i>Square</i>	<i>F</i>	<i>Sig.</i>	<i>Eta Squared</i>	<i>Parameter</i>	<i>Power^b</i>
Q3.4 I am	Corrected Model	27.822 ^a	33	.843	1.168	.271	.254	38.538	.905
confident in my	Intercept	114.949	1	114.949	159.223	.000	.585	159.223	1.000
ability to	Subject	6.844	13	.526	.729	.731	.077	9.480	.419
integrate music	Level Taught	5.455	5	1.091	1.511	.192	.063	7.556	.514
with non-arts	Subject * Level	12.314	15	.821	1.137	.332	.131	17.057	.690
subjects ...	Error	81.579	113	.722					
	Total	609.000	147						
	Corrected Total	109.401	146						

a. R Squared = .254 (Adjusted R Squared = .037)

b. Computed using alpha = .05

		<i>Type III Sum</i>		<i>Mean</i>			<i>Partial</i>	<i>Noncent.</i>	<i>Observed</i>
<i>Source</i>		<i>of Squares</i>	<i>df</i>	<i>Square</i>	<i>F</i>	<i>Sig.</i>	<i>Squared</i>	<i>Parameter</i>	<i>Power^b</i>
Q3.5 I enjoy	Corrected Model	24.911 ^a	33	.755	1.716	.020	.334	56.638	.989
helping students	Intercept	61.572	1	61.572	139.990	.000	.553	139.990	1.000
make	Subject	4.411	13	.339	.771	.688	.082	10.029	.444
connections	Level Taught	1.443	5	.289	.656	.657	.028	3.282	.231
across	Subject * Level	12.373	15	.825	1.875	.033	.199	28.130	.924
disciplines.	Error	49.701	113	.440					
	Total	392.000	147						
	Corrected Total	74.612	146						

a. R Squared = .334 (Adjusted R Squared = .139)

b. Computed using alpha = .05

		<i>Type III Sum</i>		<i>Mean</i>			<i>Partial</i>	<i>Noncent.</i>	<i>Observed</i>
<i>Source</i>		<i>of Squares</i>	<i>df</i>	<i>Square</i>	<i>F</i>	<i>Sig.</i>	<i>Squared</i>	<i>Parameter</i>	<i>Power^b</i>
Q3.6 I feel it is important for students to experience integrated arts Curricula.	Corrected Model	29.609 ^a	33	.897	1.000	.480	.226	32.989	.836
	Intercept	141.232	1	141.232	157.350	.000	.582	157.350	1.000
	Subject	11.251	13	.865	.964	.491	.100	12.535	.556
	Level Taught	2.332	5	.466	.520	.761	.022	2.598	.187
	Subject * Level	12.793	15	.853	.950	.512	.112	14.253	.589
	Error	101.425	113	.898					
	Total	854.000	147						
	Corrected Total	131.034	146						

a. R Squared = .226 (Adjusted R Squared = .000)

b. Computed using alpha = .05

		<i>Type III Sum</i>		<i>Mean</i>			<i>Partial</i>	<i>Noncent.</i>	<i>Observed</i>
<i>Source</i>		<i>of Squares</i>	<i>df</i>	<i>Square</i>	<i>F</i>	<i>Sig.</i>	<i>Squared</i>	<i>Parameter</i>	<i>Power^b</i>
Q3.7 In general, my school is supportive of integrated teaching involving the arts.	Corrected Model	44.492 ^a	33	1.348	2.517	.000	.424	83.063	1.000
	Intercept	120.625	1	120.625	225.196	.000	.666	225.196	1.000
	Subject	13.688	13	1.053	1.966	.030	.184	25.554	.912
	Level Taught	5.522	5	1.104	2.062	.075	.084	10.309	.668
	Subject * Level	9.116	15	.608	1.135	.334	.131	17.018	.688
	Error	60.528	113	.536					
	Total	646.000	147						
	Corrected Total	105.020	146						

a. R Squared = .424 (Adjusted R Squared = .255)

b. Computed using alpha = .05

		<i>Type III Sum</i>		<i>Mean</i>			<i>Partial</i>	<i>Noncent.</i>	<i>Observed</i>
<i>Source</i>		<i>of Squares</i>	<i>df</i>	<i>Square</i>	<i>F</i>	<i>Sig.</i>	<i>Eta Squared</i>	<i>Parameter</i>	<i>Power^b</i>
Q3.8 I am free	Corrected Model	12.220 ^a	33	.370	.992	.492	.225	32.720	.832
to use integrated	Intercept	57.811	1	57.811	154.796	.000	.578	154.796	1.000
teaching	Subject	2.354	13	.181	.485	.929	.053	6.304	.273
strategies	Level Taught	1.759	5	.352	.942	.457	.040	4.709	.326
as I see fit.	Subject * Level	5.380	15	.359	.960	.501	.113	14.405	.595
	Error	42.202	113	.373					
	Total	332.000	147						
	Corrected Total	54.422	146						

a. R Squared = .225 (Adjusted R Squared = -.002)

b. Computed using alpha = .05

		Type III Sum		Mean			Partial		
Source		of Squares	<i>df</i>	Square	<i>F</i>	<i>Sig.</i>	Eta Squared	Noncent. Parameter	Observed Power ^b
Q3.9 Teacher collaboration is an important component of teaching integrated ...	Corrected Model	18.713 ^a	33	.567	1.146	.293	.251	37.829	.897
	Intercept	64.825	1	64.825	131.043	.000	.537	131.043	1.000
	Subject	3.969	13	.305	.617	.836	.066	8.023	.351
	Level Taught	1.378	5	.276	.557	.733	.024	2.785	.199
	Subject * Level	8.391	15	.559	1.131	.338	.131	16.963	.686
	Error	55.899	113	.495					
	Total	392.000	147						
Corrected Total		74.612	146						

a. R Squared = .251 (Adjusted R Squared = .032)

b. Computed using alpha = .05

		<i>Type III Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>	<i>Partial Eta Squared</i>	<i>Noncent. Parameter</i>	<i>Observed Power^b</i>
Q3.10 Self-	Corrected Model	24.367 ^a	33	.738	2.122	.002	.383	70.029	.998
directed	Intercept	74.036	1	74.036	212.769	.000	.653	212.769	1.000
planning time	Subject	8.382	13	.645	1.853	.043	.176	24.090	.891
during the	Level Taught	1.635	5	.327	.940	.458	.040	4.698	.325
school day	Subject * Level	12.673	15	.845	2.428	.004	.244	36.420	.979
is an important	Error	39.320	113	.348					
component ...	Total	358.000	147						
	Corrected Total	63.687	146						

a. R Squared = .383 (Adjusted R Squared = .202)

b. Computed using alpha = .05

		<i>Type III Sum</i>		<i>Mean</i>			<i>Partial</i>	<i>Noncent.</i>	<i>Observed</i>
<i>Source</i>		<i>of Squares</i>	<i>df</i>	<i>Square</i>	<i>F</i>	<i>Sig.</i>	<i>Eta Squared</i>	<i>Parameter</i>	<i>Power^b</i>
Q3.11 I feel constrained by curricular integrated teaching.	Corrected Model	26.387 ^a	33	.800	.775	.799	.184	25.562	.693
	Intercept	285.672	1	285.672	276.741	.000	.710	276.741	1.000
	Subject	7.360	13	.566	.548	.889	.059	7.130	.310
	Level Taught	.350	5	.070	.068	.997	.003	.339	.064
	Subject * Level	14.326	15	.955	.925	.539	.109	13.878	.574
	Error	116.647	113	1.032					
	Total	1281.000	147						
	Corrected Total	143.034	146						

a. R Squared = .184 (Adjusted R Squared = -.054)

b. Computed using alpha = .05

		<i>Type III Sum</i>		<i>Mean</i>			<i>Partial</i>	<i>Noncent.</i>	<i>Observed</i>
<i>Source</i>		<i>of Squares</i>	<i>df</i>	<i>Square</i>	<i>F</i>	<i>Sig.</i>	<i>Squared</i>	<i>Parameter</i>	<i>Power^b</i>
Q3.12 I feel	Corrected Model	34.879 ^a	33	1.057	1.329	.138	.280	43.856	.946
that I don't have	Intercept	183.224	1	183.224	230.382	.000	.671	230.382	1.000
enough time to	Subject	14.091	13	1.084	1.363	.188	.136	17.718	.746
incorporate	Level Taught	8.450	5	1.690	2.125	.067	.086	10.625	.684
integrated	Subject * Level	11.929	15	.795	1.000	.460	.117	14.999	.617
teaching.	Error	89.869	113	.795					
	Total	817.000	147						
	Corrected Total	124.748	146						

a. R Squared = .280 (Adjusted R Squared = .069)

b. Computed using alpha = .05

		<i>Type III Sum</i>		<i>Mean</i>			<i>Partial</i>	<i>Noncent.</i>	<i>Observed</i>
<i>Source</i>		<i>of Squares</i>	<i>df</i>	<i>Square</i>	<i>F</i>	<i>Sig.</i>	<i>Eta Squared</i>	<i>Parameter</i>	<i>Power^b</i>
Q4.2 I have had appropriate training related to incorporate integrated teaching.	Corrected Model	37.110 ^a	33	1.125	1.399	.100	.290	46.151	.959
	Intercept	296.030	1	296.030	368.152	.000	.765	368.152	1.000
	Subject	9.128	13	.702	.873	.583	.091	11.352	.504
	Level Taught	9.307	5	1.861	2.315	.048	.093	11.574	.727
	Subject * Level	18.524	15	1.235	1.536	.104	.169	23.037	.847
	Error	90.863	113	.804					
	Total	1463.000	147						
Corrected Total		127.973	146						

a. R Squared = .290 (Adjusted R Squared = .083)

b. Computed using alpha = .05

		<i>Type III Sum</i>		<i>Mean</i>			<i>Partial</i>	<i>Noncent.</i>	<i>Observed</i>
<i>Source</i>		<i>of Squares</i>	<i>df</i>	<i>Square</i>	<i>F</i>	<i>Sig.</i>	<i>Squared</i>	<i>Parameter</i>	<i>Power^b</i>
Q4.3 I have had	Corrected Model	44.757 ^a	33	1.356	1.634	.030	.323	53.925	.984
in-service	Intercept	317.577	1	317.577	382.633	.000	.772	382.633	1.000
professional	Subject	10.601	13	.815	.983	.473	.102	12.773	.566
development	Level Taught	4.023	5	.805	.969	.440	.041	4.847	.336
training	Subject * Level	26.796	15	1.786	2.152	.012	.222	32.285	.959
related ...	Error	93.788	113	.830					
	Total	1578.000	147						
	Corrected Total	138.544	146						

a. R Squared = .323 (Adjusted R Squared = .125)

b. Computed using alpha = .05

		<i>Type III Sum</i>		<i>Mean</i>			<i>Partial</i>	<i>Noncent.</i>	<i>Observed</i>
<i>Source</i>		<i>of Squares</i>	<i>df</i>	<i>Square</i>	<i>F</i>	<i>Sig.</i>	<i>Eta Squared</i>	<i>Parameter</i>	<i>Power^b</i>
Q4.4 I have taken one or more arts courses on integrating subjects for college credit.	Corrected Model	42.073 ^a	33	1.275	1.882	.008	.355	62.115	.995
	Intercept	377.446	1	377.446	557.250	.000	.831	557.250	1.000
	Subject	13.434	13	1.033	1.526	.119	.149	19.834	.805
	Level Taught	4.789	5	.958	1.414	.225	.059	7.070	.483
	Subject * Level	30.035	15	2.002	2.956	.001	.282	44.343	.995
	Error	76.539	113	.677					
	Total	1888.000	147						
Corrected Total		118.612	146						

a. R Squared = .355 (Adjusted R Squared = .166)

b. Computed using alpha = .05

		<i>Type III Sum</i>		<i>Mean</i>			<i>Partial</i>	<i>Noncent.</i>	<i>Observed</i>
		<i>of Squares</i>	<i>df</i>	<i>Square</i>	<i>F</i>	<i>Sig.</i>	<i>Eta Squared</i>	<i>Parameter</i>	<i>Power^b</i>
Q4.5 I have	Corrected Model	51.393 ^a	33	1.557	1.507	.059	.306	49.746	.973
gained helpful	Intercept	260.959	1	260.959	252.593	.000	.691	252.593	1.000
information	Subject	11.293	13	.869	.841	.616	.088	10.931	.485
from the	Level Taught	4.615	5	.923	.893	.488	.038	4.467	.310
professional	Subject * Level	26.805	15	1.787	1.730	.055	.187	25.945	.896
development	Error	116.743	113	1.033					
courses ...	Total	1295.000	147						
	Corrected Total	168.136	146						

a. R Squared = .306 (Adjusted R Squared = .103)

b. Computed using alpha = .05

		<i>Type III Sum</i>		<i>Mean</i>			<i>Partial</i>	<i>Noncent.</i>	<i>Observed</i>
<i>Source</i>		<i>of Squares</i>	<i>df</i>	<i>Square</i>	<i>F</i>	<i>Sig.</i>	<i>Squared</i>	<i>Parameter</i>	<i>Power^b</i>
Q4.6 The information presented was built upon connections among disciplines ...	Corrected Model	39.244 ^a	33	1.189	1.138	.302	.250	37.569	.895
	Intercept	264.078	1	264.078	252.812	.000	.691	252.812	1.000
	Subject	8.932	13	.687	.658	.800	.070	8.551	.376
	Level Taught	4.802	5	.960	.919	.471	.039	4.597	.319
	Subject * Level	21.012	15	1.401	1.341	.190	.151	20.116	.780
	Error	118.035	113	1.045					
	Total	1363.000	147						
Corrected Total		157.279	146						

a. R Squared = .250 (Adjusted R Squared = .030)

b. Computed using alpha = .05

		<i>Type III Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>	<i>Partial Eta Squared</i>	<i>Noncent. Parameter</i>	<i>Observed Power^b</i>
Q4.7 The	Corrected Model	34.235 ^a	21	1.630	2.014	.023	.468	42.297	.950
professional	Intercept	215.858	1	215.858	266.693	.000	.847	266.693	1.000
development	Subject	18.676	10	1.868	2.307	.026	.325	23.074	.876
challenged	Level Taught	.501	2	.251	.310	.735	.013	.620	.096
me to foster	Subject * Level	12.776	9	1.420	1.754	.103	.247	15.784	.718
my imagination	Error	38.851	48	.809					
...	Total	578.000	70						
	Corrected Total	73.086	69						

a. R Squared = .247 (Adjusted R Squared = .027)

b. Computed using alpha = .05

		<i>Type III Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>	<i>Partial Eta Squared</i>	<i>Noncent. Parameter</i>	<i>Observed Power^b</i>
Q4.8 The	Corrected Model	39.166 ^a	33	1.187	1.376	.112	.287	45.393	.955
information	Intercept	249.456	1	249.456	289.113	.000	.719	289.113	1.000
I received was	Subject	7.052	13	.542	.629	.826	.067	8.173	.358
adaptable	Level Taught	1.205	5	.241	.279	.924	.012	1.396	.117
to my teaching	Subject * Level	23.367	15	1.558	1.805	.042	.193	27.082	.911
environment.	Error	97.500	113	.863					
	Total	1258.000	147						
	Corrected Total	136.667	146						

a. R Squared = .287 (Adjusted R Squared = .078)

b. Computed using alpha = .05

		<i>Type III Sum</i>		<i>Mean</i>			<i>Partial</i>	<i>Noncent.</i>	<i>Observed</i>
<i>Source</i>		<i>of Squares</i>	<i>df</i>	<i>Square</i>	<i>F</i>	<i>Sig.</i>	<i>Eta Squared</i>	<i>Parameter</i>	<i>Power^b</i>
Q4.9 I have conducted professional development sessions related ...	Corrected Model	47.072 ^a	33	1.426	1.526	.053	.308	50.374	.975
	Intercept	356.484	1	356.484	381.485	.000	.771	381.485	1.000
	Subject	10.297	13	.792	.848	.609	.089	11.020	.489
	Level Taught	17.122	5	3.424	3.665	.004	.140	18.323	.918
	Subject * Level	24.380	15	1.625	1.739	.053	.188	26.090	.898
	Error	105.594	113	.934					
	Total	1833.000	147						
	Corrected Total	152.667	146						

a. R Squared = .308 (Adjusted R Squared = .106)

b. Computed using alpha = .05

Appendices G

Comparing Mean Scores Jenkins (2012), School District, And State Scores

Question Number	Question	Jenkins Magnet	Jenkins Regular	School District	State
2.2	Using music to teach multiplication facts or the order of U. S. presidents.	2.71	2.91	2.81	2.89
2.3	Singing a song about earth day and the importance of recycling materials during a science lesson.	2.89	3.12	3.01	3.01
2.4	Exploring a blues song to examine its musical elements, its use of irony, and the role of blues in society.	3.93	3.83	3.79	3.80
2.5	Comparing the painting, “Mother and Child” by Picasso with the Spanish song “A La Nanita Nana” to examine how the creators used artistic elements to create expressed emotions.	3.50	3.76	3.67	3.63
2.6	Marching in place and playing rhythm sticks while singing the song “This Land is Your Land.”	2.21	2.44	2.84	2.85
2.7	Presenting musical instruments of the Ancient Silk Road in general music while a classroom a teacher simultaneously explores historical/cultural practices of the Silk Road during social studies.	3.43	3.48	3.73	3.61
2.8	Playing instruments while singing a song to memorize the order of the planets.	2.50	2.96	2.97	2.95

2.9	Examining and comparing the ritual “This Train is Bound for Glory” and the poem “Freedom Train” by Langston Hughes for their cultural and historical significance.	3.81	3.84	3.71	3.66
2.10	Playing Copland's "Fanfare for the Common Man" while a classroom a teacher simultaneously explores historical/cultural practices of the home-front during World War 2.			3.47	3.40
3.2	I feel it is important for students to experience integrated arts curricula.	3.96	3.79	3.46	3.46
3.3	I am confident in my ability to integrate music with other arts subjects such as dance, drama, and visual art.	3.57	3.43	3.33	3.25
3.4	I am confident in my ability to integrate music with non-arts subjects, such as language arts, science, math, or history.	3.64	3.35	3.17	3.16
3.5	I enjoy helping students make connections across disciplines.	3.89	3.84	3.57	3.53
3.6	I feel it is important for each subject included in an integrated unit to have an equal amount of time for exploration.	3.59	3.00	2.73	2.78
3.7	In general, my school is supportive of integrated teaching involving the arts.	3.71	3.09	3.14	3.08
3.8	I am free to use integrated teaching strategies as I see fit.	3.71	3.51	3.70	3.63
3.9	Teacher collaboration is an important component of teaching integrated lessons.	3.89	3.74	3.54	3.53

3.10	Self-directed planning time during the school day is an important component of teaching integrated lessons.	3.79	3.68	3.60	3.59
3.11	I feel constrained by curricular integrated teaching.	2.00	1.72	2.14	2.22
3.12	I feel that I don't have enough time to incorporate integrated teaching.	2.68	2.82	2.76	2.83
4.2	I have had appropriate training related to integrating other subjects into my music teaching.	3.14	2.67	1.94	1.99
4.3	I have had in-service professional development training related to integrated music teaching.	3.54	2.08	2.01	1.87
4.4	I have taken one or more arts courses on integrating subjects for college credit.	1.43	1.25	2.01	1.53
4.5	I have gained helpful information from the professional development courses I have taken.	3.52	2.58	2.44	2.23
4.6	The information presented was built upon connections among disciplines that led me to create new meanings.	3.46	2.56	2.36	2.14
4.7	The professional development challenged me to foster my imagination, analytical skills, and reflection in preparation for teaching integrated units.	3.20	2.43	2.31	2.14
4.8	The information I received was adaptable to my teaching environment.	3.19	2.51	2.57	2.24

4.9	I have conducted professional development sessions related to interdisciplinary music teaching for my colleagues.	3.15	1.77	1.61	1.62
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