

Working with Students with Special Needs:
Knowledge and Practices of Southeastern Music Educators

by

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Abstract

The purpose of this study was to examine the knowledge and inclusion practices of music educators in the Southeastern United States, specifically in Alabama, Florida, Georgia, North Carolina, South Carolina, Tennessee, and Virginia. Participants ($N = 10,666$) included K-12 general music, band, orchestra, and choir teachers. Participants were asked to complete a questionnaire that consisted of 3 sections: (a) demographics, (b) training, special needs knowledge, and processes, and (c) accommodations and modifications. The questionnaire was distributed via email and the NAFME Research Assistance Program (email transmission). The final response rate was ($n = 1032, 9.68\%$). The results indicated that music educators in the Southeast are participating in coursework, professional development, and their own personal reading and research, but that they are still overwhelmingly unfamiliar with the legislation and the eligibility categories covered by the Individuals with Disabilities Education Act (IDEA) legislation. For section 3 of the questionnaire, music educators indicated that they are providing accommodations and modifications, most frequently, preferred seating and modified assignments/music parts. They also indicated that they are somewhat comfortable doing so. Group comparisons were computed using Kruskal-Wallis, Mann-Whitney U tests, and post hoc Chi-Square tests. Significant differences were found when comparing respondents' answers by state, highest degree earned, grade level(s) taught, coursework information, professional development, personal development, whether participants taught at least one class with special needs students, and whether they taught at least one self-contained class.

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CHAPTER I

INTRODUCTION

The landscape of American education forever changed with the passage of legislation related to the education of students with special needs, specifically Individuals with Disabilities Education Act (IDEA). Previously, students such as these were educated separately from their regular education peers in separate schools, classrooms, or residential facilities. Though the legislation does not specifically mention music or music education, all music educators are serving a more diverse population of students. The following is a brief description of the history and legislation, as well as the classifications of special needs recognized by the law.

Selected History and Legislation

Passed by Congress in 1970, The Education of the Handicapped Act (EHA) provided additional funding for federal grant programs, and state and local special education programs. It also helped in the creation of special education teacher training programs. In 1971, another federal court case, *Pennsylvania Association of Retarded Citizens (PARC) v. Commonwealth*, helped establish the right for a free and appropriate education for students who were mentally retarded (currently recognized as intellectually disabled) (Adamek & Darrow, 2005). According to Pennsylvania law, intellectually disabled students were excluded from educational experiences, but this court case overturned the law that allowed their exclusion. The main outcome of the court decision was that intellectually disabled students could not be excluded from schools based on their diagnosis.

The next year (1972), the *Mills v. Board of Education* case further expanded on the decision of *PARC v. Commonwealth*, helping to address the rights of students with other disabilities, besides intellectual disabilities. This case determined that excluding students with disabilities from educational experiences is unconstitutional. Another important part of this decision was that students with disabilities have the right to due process, and according to Rothstein, that due process “include procedures relating to the labeling, placement, and exclusionary stages of decision making” (as cited in Adamek & Darrow, 2005, p. 22).

Section 504 of the Rehabilitation Act of 1973 “prohibits any state, local, or private organization that receives federal funds from discriminating against an otherwise qualified person solely on the basis of a disabling condition” (Adamek & Darrow, 2005, p. 22). This law applies for students who may not qualify for special education or services under IDEA. Eligible students include those who may have medical conditions such as diabetes or asthma, behavior problems or Attention Deficit Hyperactivity Disorder (ADHD), or addiction issues (Adamek & Darrow, 2005). Students cannot be denied the opportunity to participate in any school activity, whether academic or extracurricular.

Public Law 94-142 (The Education for all Handicapped Children’s Act) was passed in 1975, and specified that no student be denied a free and appropriate public education (FAPE) within the least restrictive environment. Renamed the Individuals with Disabilities Education Act (IDEA) in 1990, significant amendments approved in 1997 aligned with the Goals 2000: Educate America Act legislation. More recently, in 2004, reauthorization as the Individuals with Disabilities Education Improvement Act of 2004 (Public Law 108-446) occurred.

Principles of the Individuals with Disabilities Education Act

There are six major principles included in the Individuals with Disabilities Education Improvement Act (IDEA) of 2004 (Public Law 108-446). These six principles are: (a) zero reject, (b) nondiscriminatory evaluation, (c) appropriate education, (d) least restrictive environment, (e) procedural due process, and (f) parent and student participation (Adamek & Darrow, 2005; Hammel & Hourigan, 2011; Heward, 2009; Turnbull, Turnbull, & Wehmeyer, 2010).

Zero Reject Principle

The zero reject principle applies to all schools (whether public or private), hospitals, or residential facilities, and guarantees that students with disabilities will have access to a free and appropriate public education (FAPE). As Adamek and Darrow state (2005, p. 29), “Students may not be excluded from educational services because of a disability, no matter how severe the disability.” This also applies in the same way to a student’s behavior, as long as the behavior is a result of, or is caused by a student’s disability (Adamek & Darrow, 2005; Hammel & Hourigan, 2011). Therefore, the disciplinary actions taken with students with disabilities may be modified, which ultimately protects students from being denied a free and appropriate education due to suspension or expulsion from school.

Nondiscriminatory Evaluation

The second principle of IDEA, nondiscriminatory evaluation, has two purposes (Adamek & Darrow, 2005; Hammel & Hourigan, 2011; Heward, 2009; Turnbull, Turnbull, & Wehmeyer, 2010). This principle provides students with an unbiased evaluation to determine if they have a disability. If it is determined that a student has a disability, he or she is evaluated further to determine if and what special education and services are needed for the student to be successful.

“The team must look at the whole child in terms of cognitive, behavioral, physical, or other developmental factors, and identify not only the student’s deficit areas but also areas of strength and ability” (Adamek & Darrow, 2005, p. 30).

Turnbull, Turnbull, and Wehmeyer (2009) list a four-step process used to evaluate students. The process begins with the screening of students, determining which students may need further evaluation. The second step in the process is pre-referral, which allows intervention for students who are not making expected progress. The third step is response to intervention, which offers students modified general education services to see if the student shows progress. The fourth step is referral, meaning a formal request is made for a student to receive an unbiased evaluation (Turnbull, Turnbull, and Wehmeyer, 2009). If the evaluation determines that a student needs special education and services, then the team and the school are required to provide those, with appropriate documentation in the student’s Individualized Education Program (IEP).

Appropriate Education

Appropriate education, the third principle of IDEA, ensures that students with disabilities are provided with an appropriate education, one that is designed with the individual child in mind, and that is provided free of cost to parents or guardians (Adamek & Darrow, 2005; Heward, 2009). According to IDEA, “Free appropriate public education means special education and related services that (a) are provided at public expense, under public supervision and direction, and without charge; (b) meet the standards of the SEA, including the requirements of this part, (c) include an appropriate preschool, elementary school, or secondary school education in the State involved; and (d) are provided in conformity with an individualized

education program (IEP) that meets the requirements of 300.320 through 300.324 (retrieved from <http://www.ecfr.gov> on Monday, March 2, 2015).

For students who are of school age (age 3-age 21), IDEA provides for an Individualized Education Program (IEP) (Adamek & Darrow, 2005; Hammel & Hourigan, 2011; Heward, 2009; Turnbull, Turnbull, & Wehmeyer, 2010). Under IDEA, an appropriate education is one where the student is making progress and benefiting from special education and the related services provided (Adamek & Darrow, 2005, p. 31). The development of the IEP is based on the student's evaluation, and is outcome oriented (Turnbull, Turnbull, & Wehmeyer, 2010). According to Heward (2009), "The IEP specifies the child's unique educational needs, states present level of performance, identifies measurable annual goals, and describes the specific special education and related services that will be provided to help the child attain those goals, and benefit from education" (p. 19).

Schools are required to provide students with disabilities an appropriate education in what is referred to as the least restrictive environment (LRE). "In practice, this rule mandates that a school must educate a student with disabilities with students who do not have disabilities, to the maximum extent possible for the students to benefit from education" (Adamek & Darrow, 2005, p. 31). IDEA promotes placement in the general education classroom, and according to Heward (2009) and Turnbull, Turnbull, and Wehmeyer (2010), general education refers to academics, extracurricular activities, and nonacademic activities, such as lunch, recess, transportation, and dances. This allows students with disabilities the opportunity to interact with students who do not have disabilities. If a student is having difficulty in the general education classroom due to the kind of or severity of the disability, then the student may be placed in a more "restrictive" environment. This takes place only after the school has used modifications

and supplementary services in the general education classroom to accommodate the students' needs. The IEP team helps determine which placement is best for the individual student, whether it is a general education classroom, a resource room, a special education classroom, or a school or institution.

Procedural Due Process

Procedural due process, the fifth of the IDEA principles, creates accountability between the school and the families of students with special needs. If students or parents feel that the placement or services they are receiving are not appropriate, they have the right to procedural due process. This process begins with a resolution session, and if the issues cannot be resolved, mediation can be used, although not required by law (Turnbull, Turnbull, & Wehmeyer, 2010). If the issues are still unresolved, both the school and the families have the right to a due process hearing. These hearings are similar to a regular trial, with lawyers present, evidence and witnesses presented, and with the hearing officer issuing a decision in the case. If either party (school system or family) is not pleased with the outcome, the case may be appealed.

Parent and Student Participation

The final principle of IDEA is parent and student participation. Parents, and students, when appropriate, should be involved in the educational process. Parents should be included on the IEP team, helping to determine specific goals, placement, or other services needed for their child. This also allows parents access to their child's school records.

Categories and Definitions of Special Needs

There are several categories and definitions of special needs. Specifically, there are emotional disabilities, cognitive disabilities, communication disabilities, vision and/or hearing

loss, and physical disabilities. Detailed descriptions of each category are included in the following section.

Behavior Disorders

According to IDEA (2004):

“...emotional disabilities (emotional disturbance) means a condition exhibiting one or more of the following characteristics over a long period of time and to a marked degree that adversely affects a child's educational performance: (A) An inability to learn that cannot be explained by intellectual, sensory, or health factors, (B) An inability to build or maintain satisfactory interpersonal relationships with peers and teachers, (C) Inappropriate types of behavior or feelings under normal circumstances, (D) A general pervasive mood of unhappiness or depression, (E) A tendency to develop physical symptoms or fears associated with personal or school problems.”

Emotional disabilities, characterized by certain behavior patterns, include those externalized or internalized. Externalizing patterns involve outward displays that are more aggressive and disruptive to the classroom environment. Externalizing behaviors include, but are not limited to, hitting, kicking, spitting, fighting, tantrums, or vandalism, among other behaviors. Internalizing patterns involve more inward displays. There is very little social interaction with other students or the teacher. Internalizing behaviors include anxiety, depression, fantasizing, playing alone, or crying (Adamek & Darrow, 2005; Heward, 2009, Turnbull, Turnbull, & Wehmeyer, 2010).

Examples of emotional disabilities include conduct disorder, oppositional defiant disorder, mood disorders, anxiety disorders, and even schizophrenia (Turnbull, Turnbull, & Wehmeyer, 2010). Characterized by excessive worrying and fear, students with anxiety

disorders often struggle with phobias, obsessions, and excessive worrying that are often not the result of any life experience. Depression is another common indicator of a mood disorder. Students with depression may feel sad, and may lose motivation to do the things they once enjoyed. They may also display changes in eating or sleeping habits, and may feel that life is hopeless. Another mood disorder, known as bipolar disorder, is represented by extreme mood swings. A student with bipolar disorder may sometimes feel depressed, but at other times, may have a feeling of euphoria or increased motivation.

Oppositional defiant disorder, characterized by behavior that includes arguing, tantrums, deliberate disruption of the classroom, and anger, is a precursor to conduct disorders. Conduct disorders include extremely aggressive behaviors such as physical harm to people or animals, vandalism, stealing, skipping school, or drug and alcohol use. The final type of behavior disorder is schizophrenia, which is characterized by delusional behavior, hallucinations, and loss of contact with reality (Adamek & Darrow, 2005; Heward, 2009; Turnbull, Turnbull, & Wehmeyer, 2010).

Cognitive Disabilities

The American Association on Intellectual and Developmental Disabilities (AAIDD) states, “Intellectual disability is a disability characterized by significant limitations in both intellectual functioning and in adaptive behavior, which covers many everyday social and practical skills. Disabilities usually appear before age 18 (AAIDD, 2015, website). People who are diagnosed with intellectual disabilities (formerly mental retardation) typically have an intelligence quotient (IQ) of less than 70 or as high as 75. The IQ test is an important tool for measuring intellectual functioning, but a low IQ score alone does not constitute an intellectual disability. A person who is intellectually disabled must also be limited in adaptive skills.

According to Adamek and Darrow (2005), “Adaptive behaviors are skills that are important to function safely and effectively in everyday life” (p. 158). Adaptive skills exist in three distinct categories according to AAIDD: conceptual skills, social skills, and practical skills.

Conceptual skills include reading, writing, and money skills, while social skills deal with responsibility, self-esteem, and functioning as a citizen, in regard to rules and laws. Practical skills are necessary for everyday activities such as eating, personal hygiene, dressing, working, or using transportation (AAIDD, 2015). There are many possible causes for intellectual disabilities, and only a small percentage of cases have an identified cause.

Learning disabilities also fit under the umbrella of cognitive disabilities, and under IDEA, are defined as “a disorder in 1 or more of the basic psychological processes involved in understanding or in using language, spoken or written, which disorder may manifests itself in an imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations” (Heward, 2009, p. 173; U.S. Government, 2004). Furthermore, IDEA states:

Disorders Included – Such term includes such conditions as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. Disorders Not Included – Such term does not include a learning problem that is primarily the result of visual, hearing, or motor disabilities, of mental retardation, of emotional disturbance, or of environmental, cultural, or economic disadvantage (P.L. 108-466, Sec. 602[30]). (Heward, 2009, p. 173).

Students with learning disabilities may have trouble understanding language, math, and problem solving. Students may become easily frustrated and have trouble paying attention in class. “Some social and emotional problems, such as low frustration tolerance, difficulty with peers, and lack of attention or hyperactivity, may cause problems for the student and will need to

be addressed through collaboration with the classroom teacher and development of appropriate instructional accommodations” (Adamek & Darrow, 2005, p. 167).

Traumatic brain injuries are also covered by the IDEA legislation. These refer to an: acquired injury to the brain caused by an external physical force, resulting in total or partial functional disability or psychosocial impairment, or both, that adversely affects a child's educational performance. Traumatic brain injury applies to open or closed head injuries resulting in impairments in one or more areas, such as cognition; language; memory; attention; reasoning; abstract thinking; judgment; problem-solving; sensory, perceptual, and motor abilities; psychosocial behavior; physical functions; information processing; and speech. Traumatic brain injury does not apply to brain injuries that are congenital or degenerative, or to brain injuries induced by birth trauma” (Part 300, Assistance to States for the Education of Children with Disabilities, 2015).

Traumatic brain injuries can cause problems in any and all areas, from cognitive ability, social skills, behavioral skills, or communication skills (Adamek & Darrow, 2005). This type of injury accounts for less than 1% of students who receive services under IDEA (p. 177).

Communication Disabilities

Communication disabilities include autism and other autism spectrum disorders (ASD), as well as speech and language disorders. “Autism has six distinct characteristics: (1) atypical language development, (2) atypical social development, (3) repetitive behavior, (4) problem behavior, (5) sensory and movement disorders, and (6) differences in intellectual functioning” (Turnbull, Turnbull, & Wehmeyer, 2010, p. 302). Because there are varying levels of the above characteristics, autism is a spectrum disorder. These types of disorders vary by individual, and students with autism or another autism spectrum disorder may or may not exhibit the same

behaviors or traits. Other disorders included in this classification include Rett's syndrome and Asperger's syndrome, among others.

Other types of communication disabilities include speech and language disabilities. "A speech disorder refers to difficulty producing sounds as well as disorders of voice quality or fluency of speech" (Turnbull, Turnbull, & Wehmeyer, 2010, p. 154). Heward (2009) identifies three different types of speech impairments: articulation disorders, fluency disorders, and voice disorders. Articulation disorders imply problems with the production of speech sounds, and include four different areas: distortion, substitutions, omissions, and additions. Fluency disorders deal with difficulty with the flow and rhythm of speech, and include problems like stuttering or cluttering. Voice disorders deal with problems with the quality and use of the voice. These are more common in adults, and include two types: phonation disorder and resonance disorder.

"ASHA (1993) defines a language disorder as "impaired comprehension and/or use of spoken, written, and/or other symbol systems" (as stated in Heward, 2009, p. 305). Language disorders may include problems with the content, form, or pragmatic use. Students who have problems with content will have trouble understanding the meanings of words. Students who have problems with form will have difficulty ordering sounds or using the correct tenses. Students with problems in pragmatic use will have difficulty using the correct language at the correct times, therefore, struggling to have conversations with others (Adamek & Darrow, 2005).

Vision/Hearing Loss

A person is legally blind if his or her vision is 20/200 (based on the Snellen chart). This is based on visual acuity, which is a person's ability to clearly identify forms and details (letters, numbers, symbols) (Adamek & Darrow, 2005; Heward, 2009). There are several different types

and (levels) of vision loss: astigmatism, hyperopia, and myopia. Astigmatism results in blurry vision, and often occurs in conjunction with hyperopia or myopia. Hyperopia, commonly known as farsightedness, results in difficulty seeing things that are close. Myopia is the opposite, nearsightedness, and results in difficulty seeing things that are far away. Typically, these types of vision loss require the use of corrective lenses (contacts or glasses). Other types of eye conditions include albinism, amblyopia, cataracts, glaucoma, nystagmus, optic nerve atrophy, optic nerve hypoplasia, retinitis pigmentosa, retinoblastoma, retinopathy of prematurity, and strabismus (Adamek & Darrow, 2005; Heward, 2009).

Under IDEA, hearing impairments are defined as being severe enough to alter a child's ability to process linguistic material, enough that their academic performance is negatively affected (Adamek & Darrow, 2005; Heward, 2009; Turnbull, Turnbull, & Wehmeyer, 2010). Unilateral hearing loss means the loss occurs in one ear, while bilateral hearing loss affects both ears. There are two types of hearing loss: conductive hearing loss and sensorineural hearing loss. Conductive hearing loss is the result of problems with conducting (or transmitting) sounds to the inner ear (Adamek & Darrow, 2005; Heward, 2009). This type of hearing loss typically require surgical procedures or other medical treatment. Sensorineural hearing loss is the result of damage to the auditory nerve. This means that the sound reaching the brain is distorted or is not transmitted at all.

Physical Disabilities

IDEA identifies physical disabilities under two categories: orthopedic impairments and other health impairments. The term "physical disability" is another commonly used term. Orthopedic impairments are those caused by "congenital anomaly (absence of limbs), disease (rheumatoid arthritis), or other causes (cerebral palsy)" (U.S. Government, 2004). There are two

types of physical disabilities: neurological conditions and musculoskeletal conditions.

Neurological conditions include cerebral palsy, seizure disorders, spina bifida, and spinal cord injuries. Musculoskeletal conditions include muscular dystrophy, amputations or congenital malformations, osteogenesis imperfecta (brittle bone disorder), achondroplasia, and juvenile rheumatoid arthritis (Adamek & Darrow, 2005; Heward, 2009; Turnbull, Turnbull, & Wehmeyer, 2010).

As indicated in the sections above, IDEA greatly affects how teachers work with students with disabilities. It is unclear to what extent teachers truly understand all of the principles in IDEA, much less the many identified disabilities. Moreover, it is not clear how many music educators know about and/or consider student disabilities.

Need for the Study and Purpose

Since the passage of P. L. 94-142, music educators have found themselves responsible for the inclusion of students with disabilities (Atterbury, 1986; Frisque, Niebur, & Humphreys, 1994; Gfeller, Darrow, & Hedden, 1990; Gilbert & Asmus, 1981). Research has been done on music teacher attitudes regarding the inclusion of such students, and results indicate that most music educators possess a positive attitude (Damer, 1979; Hawkins, 1991; White, 1981) toward teaching students with disabilities. However, many music educators also express concern about including students with certain types of disabilities, specifically, more severe disabilities. This is because such students may require more instructional time and modifications/accommodations, or because they may cause disruptions in the classroom.

Teacher preparation for teaching students with disabilities is a growing area of interest among music educators, university faculty, and researchers. Colwell and Thompson (2000) examined national course offerings, while Heller (1994) sought to determine how colleges and

universities were preparing preservice teachers for working with students with disabilities. Most colleges and universities did not have required courses for music students, though most had other courses related to teaching students with disabilities. Overwhelmingly, music educators feel that their training is insufficient for working with students with disabilities (Gfeller, Darrow, & Hedden, 1990; Hahn, 2010; Hammel, 2001; Nelson, 1980; Shehan, 1977).

Mainstreaming and inclusion practices are an important area of interest for music educators required to include such students (Atterbury, 1986; Frisque, Neibur, & Humphreys, 1994; Gfeller, Darrow, & Hedden, 1990). This research focused on the Midwest (Iowa and Kansas), the Southern United States, and the West (Arizona). However, southeastern teachers are not currently represented. Therefore, the purpose of this study was to examine the knowledge and inclusion practices of music educators in the Southeast United States, specifically in Alabama, Florida, Georgia, North Carolina, South Carolina, Tennessee, and Virginia. The research questions for this study were:

1. What coursework, professional development, or personal development have participants received/completed for working with students with special needs?
2. If participants in this study had any training, how long ago did they have that training?
3. How familiar are participants with the special needs specific conditions and principles of IDEA legislation?
4. How often do participants participate in special needs processes and/or receive instructional support for working with special needs students?
5. How often do participants provide accommodations and/or modifications for special learners?

6. How confident and comfortable are participants with providing accommodations and/or modifications?
7. How well do participants think special needs students participate in music classes?
8. What differences, if any, exist between participants' responses, based on the following demographic variables? Variables included: (a) teaching specialty, (b) teaching level, (c) education level, (d) related coursework, (e) professional development, (f) personal development, (g) how many classes they teach with special needs students, and (h) how many students they currently teach.

CHAPTER II

REVIEW OF LITERATURE

This review of literature is categorized into several headings. The headings are Music Educator Preparation, Music Educators' Preparation and Attitudes, and Mainstreaming/Inclusion Practices.

Music Educator Preparation

Researchers have examined music educators' preparation for teaching students with special needs (Colwell & Thompson, 2000; Gilbert & Asmus, 1981; Hahn, 2010; Hammel, 2001; Heller, 1994; Hourigan, 2007). Colwell and Thompson examined national course offerings in special education, specifically for music education students. This included what courses were being offered, whether the courses were required or elective, and if the material was content specific to music or not. The results indicated that the majority of schools did require at least one course in special education, though most were not content specific. Schools offering degrees in music therapy offered more content specific courses. There were six common course titles, and the researchers identified five possible reasons for the lack of course availability: university requirements, College of Education requirements, extensive curriculum, personnel availability, and NASM (National Accreditation of Schools of Music) requirements. Further research is needed to examine music methods courses for ways to incorporate material related to special learners.

Gilbert and Asmus (1981) explored music educators' prior experience with students with special needs, their knowledge regarding legislation, their professional needs and the challenges they face in teaching students with the special needs. The results indicated that most music educators were aware of the legislation and had some experience teaching students with special needs. Elementary and general music educators had more knowledge of the legislation and the IEP process. The researchers recommended additional research to examine the IEP process and music educators' role in the process, development of appropriate curricula, assessment, and classroom management.

Hahn (2010) also examined music educators' training in working with students with disabilities, and sought to discover the current inclusionary practices of music educators. This study also addressed the participation of music educators in the placement and IEP process, accommodations and modifications, professional development, and challenges faced by music educators. Participants were music educators ($N = 363$) in Pennsylvania. Participants completed a survey regarding their preparation and current practices. The results indicated that many music educators were teaching students with disabilities, but that they have limited training and knowledge about teaching these students. However, most participants indicated attending additional professional development regarding students with disabilities. In addition, music educators indicated that they were rarely included in the placement process or in the development of the IEP, though they reported making necessary accommodations/adaptations. Music educators also indicated that they had limited resources and time for preparing for teaching students with disabilities, but that they had adequate support from administration and personnel. There needs to be an increased effort to provide better preparation for music educators and more collaboration between music educators and special educators. Music

educators must also accept some responsibility for providing adequate instruction for students with disabilities. They should seek out communication with the appropriate personnel, they should examine the IEP, and they should be active and engaged in the placement process, especially if they have been invited to do so. Further research on collaboration and possible accommodations and adaptations for students with disabilities would be beneficial.

Hammel (1999) developed an appropriate unit of study for pre-service music educators based on the inclusion of special learners. The goal was to impact and improve music teacher preparation through identification of necessary teacher competencies, both currently used strategies and those that are necessary for the successful inclusion of special learners, and examination of college and university curricula dealing with special learners. Participants included elementary music educators and college and university faculty members. Both groups completed a survey regarding teacher competencies (music educators were asked to indicate the competencies that were currently being used, while the college and university faculty members were asked to indicate which competencies they perceived to be the most important for pre-service teachers). The faculty members submitted copies of course documents, specifically the syllabi, for analysis.

Hammel (1999) also interviewed three in-service music educators, with each being videotaped and transcribed. Each of the three music educators selected a student (special learner) for observation as part of the study. The observation allowed the researcher to view various competencies as demonstrated by music educators, interactions of teachers and student(s). In-service music educators and college and university faculty members considered thirteen competencies essential. These included topics in the following areas: general knowledge, legal aspects, assessment and evaluation, curriculum, classroom structure, classroom

management, methods and materials, and communication skills. The area of most concern for music educators was the area of assessment and evaluation. This study confirms that music educators are providing high quality music experiences for special learners, and that these identified competencies are important when trying to successfully include special learners. There is concern that music educators may not be receiving adequate information and training in their education before teaching in a classroom. Further research could explore the most successful ways to include special learners and to provide them with high quality music instruction.

Hammel (2001) examined the preparation and competencies of music educators in teaching special learners. Participants were in-service elementary music educators in Virginia ($N = 202$). Each educator completed a survey regarding their pre-service education, including topics, course work, and experiences with special learners. The survey also addressed the types of special learners most frequently discussed, observed, and taught as part of pre-service education. Educators reported that special learners with learning disabilities, visual or hearing impairments, and mental retardation were the most frequently discussed.

Hammel (2001) found there was significantly more discussion about special learners than actual observation or teaching of special learners. Educators reported very few observation opportunities (76% observed between 0-5 hours) and very few teaching experiences (64% taught between 0-5 hours) during pre-service experience. The results also indicated that teachers with fewer years of teaching experience had more experiences with special learners in all areas (discussion, observation, and teaching). Educators also requested more relevant course work, and more materials and adaptations for the music classroom. Educators also expressed frustration with the challenges of teaching special learners, from their own capabilities and

expectations, communication with other qualified personnel and families and involvement in the placement process, lack of experience, and classroom management. Colleges and universities have made improvements in their curricula and preparation of pre-service teachers for working with special learners, but further work is needed to ensure that teachers can successfully include special learners in the music classroom.

In another study, Hammel (2001) examined teacher competencies used by music educators when including special learners in the classroom. The secondary purpose of the study was to identify competencies included in curriculum by colleges and universities to prepare music educators, and which of those competencies were viewed as essential. Data collected included surveys, interviews, and observations. The researcher identified fourteen essential competencies for music educators, including the areas of general knowledge, legal aspects, assessment and evaluation, curriculum planning, classroom structure, classroom management, methods and materials, and communication skills.

Heller (1994) examined how colleges and universities in the Great Lakes region of the United States are preparing pre-service teachers to work with special learners. Participants included music education faculty ($N = 333$) from 103 colleges and universities in the Great Lakes region, including the following states: Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin. Participants completed a questionnaire, with a final return rate of 192 questionnaires, and 179 questionnaires used in the data analysis. The majority of participants who taught in public school before their employment at the college/university level indicated experience teaching special learners, while there were fewer participants who taught in private schools that indicated experience with special learners. Those faculty members who had prior experience with special learners were more likely to include mainstreaming in their course content, though a

large percentage (63%) indicated that topics related to special learners and mainstreaming were included. Most participants indicated that pre-service teachers worked with special learners in their fieldwork and student teaching placements. Less than half the colleges and universities surveyed indicated requirements within the music department that focused on special learners, while undergraduate students were required to take other courses with emphasis on special learners and mainstreaming at the majority of the schools surveyed. At the time of this study, the schools were not planning to implement any changes or increased requirements. This study helps corroborate other research that indicates that teacher preparation for teaching special learners has been and still is inadequate. Pre-service and in-service teachers need specific strategies for teaching special learners that will ensure inclusion and success for those students. Colleges and universities with successful programs that include experiences with special learners should be examined and used as models for other schools.

Music Educators' Perceptions and Attitudes

Several researchers have examined music educators' perceptions and attitudes about working with special learners (Bompani, 2005; Damer, 1979; Darrow, 1999; Gfeller, Darrow, & Hedden, 1999; Hourigan, 2007; Jellison, & Taylor, 2007; Nabb, & Balcetis, 2010; Scott, Jellison, Chappell, & Standridge, 2007; & Sharrock, 2007; VanWeelden, K., & Whipple, J., 2012; VanWeelden, K., & Whipple, J., 2014). This section includes a review of their work.

Jellison and Taylor (2007) conducted a thorough literature review of studies regarding the attitudes of music educators toward students with disabilities and inclusion practices. Thirty-two studies with original data were included in this review. They found that studies that included direct contact with individuals with disabilities were effective in improving attitudes and

perceptions toward individuals with disabilities. Constructed rating scales were most commonly used by researchers to collect necessary data.

Boumpani (2005) examined music educators' attitudes and approaches to teaching reading disabled students in middle school instrumental classes in the state of North Carolina. The specific focus included instructional approaches (non-traditional or alternate approaches). Participants included 112 middle schools from the state of North Carolina. The final return rate was 71 surveys. Middle school served as the focus of this study because instrumental instruction begins in middle school in North Carolina. Participants completed a questionnaire that focused on four distinct areas: awareness, understanding, attitude, and approaches to teaching reading disabled students. The results indicated that the majority of the music educators were aware of learning disabled students' placement into the instrumental music program (88.7%). Most participants had at least one course in dealing with music and special learners, with the majority learning about special learners through in-service workshops. Music educators also indicated that they had never requested removal of a student with a disability, and almost half stated that they would request placement for reading disabled students in their classes. They also indicated that they would be willing to seek professional opportunities for understanding (workshops). Most music educators indicated they provided modification and accommodations for students with disabilities. Only 30.4% of participants stated they modified instruction based on research.

According to Boumpani's research (2005), music educators' years of experience did not significantly influence whether they decided to seek information regarding the inclusion of students with reading disabilities. Providing appropriate modifications for reading disabled students is challenging for educators, as large numbers of participants did not indicate understanding of the processes associated with modifying instruction. Music educators indicated

that they spent more time with reading disabled students. Peer tutoring and rote teaching was commonly used approaches when teaching reading disabled students. Most educators will teach students with disabilities, and therefore, educators (including music educators) must be aware of students' needs, they must have understanding of the disabilities and appropriate strategies for teaching students with disabilities. Positive attitudes also contribute to the success of students with disabilities, and alternate approaches can ensure the success of all students.

Damer (1979) examined the attitudes of music educators regarding the inclusion of handicapped students in North Carolina public schools. Participants were elementary and secondary general music, instrumental, and choral educators. The researcher used a constructed instrument, Attitudes Towards Handicapped Students, and a Personal Questionnaire to collect data. Overall, participants indicated positive attitudes regarding handicapped students. Secondary choral educators were less accepting of handicapped students' participation in their classes than other music educators. Participants also indicated that certain types of handicaps were more acceptable than others. Specifically, secondary choral educators did not indicate a willingness to accept students with speech/language impairments, mental retardation, or emotional disturbances. However, if additional training and assistance were offered, there was a significant increase in the music educators' willingness to include such students in the music classroom.

Hourigan (2007) examined the perceptions of preservice teachers in working with a student with special needs. The researcher also explored his own perceptions he had as the music teacher educator through the process of organizing and coordinating the fieldwork experience and preparing the preservice teachers to teach students with special needs. Finally, the researcher examined the challenges of the student and his family. The researcher used a

phenomenological approach, specifically, a case study design. The participants included two preservice music educators, one student with special needs, his parents, the junior high school band director, and the researcher. The student with special needs was a sixth grader diagnosed with traumatic brain injury. Because of his injury, he struggled with receptive and expressive language. The two preservice music teachers assisted him in his regularly scheduled band class. All participants except for the band director maintained a journal reflecting their experiences throughout the study. The researcher observed the preservice educators working with the student individually and in the classroom setting. Both the preservice educators and the band director participated in semi-structured interviews. Interview transcripts, field notes, and journals were coded using open coding. As a result, axial codes were identified.

Both preservice educators expressed a lack of preparation and experience for working with students with special needs. Participants viewed the classroom setting as a challenge for both the educators and the student. Classroom management appeared to be lacking, and because of this, the student and the educators struggled with distractions. The band director expressed a lack of support for the student, the preservice teachers, and the researcher, and often asked the educators to complete tasks unrelated to their assigned duties with the student. More was accomplished during the individual sessions. The student did well when asked to perform music that he heard aurally, but struggled with reading music. Therefore, the preservice educators and the researcher were able to reflect and adapt their teaching to meet the needs of the student. The student and his parents seemed encouraged by the presence of the preservice educators. By the conclusion of the study, both educators felt more confident in working with a student with special needs, and felt that this experience was a positive opportunity that contributed to their fieldwork assignment.

White (1981/1982) examined the attitudes of music educators when integrating students with special needs. Participants included music educators from three school systems in North Carolina ($N = 87$). Each participant completed a personal questionnaire and an attitudinal survey (Attitudes Toward Handicapped Students). The Personal Questionnaire collected demographic data, while the ATHS consisted of a scale to measure attitudes of the music educators toward students with disabilities. Music educators in this study indicated positive attitudes towards students with disabilities, but they also felt there was a significant need for separate schools for students with physical disabilities or mental retardation (now intellectual disabilities). The majority of participants also indicated a positive attitude regarding inclusion of such students into the regular education classroom. Like other studies, the elementary general music teachers were the most willing to participate in the inclusion of students with special needs. However, the specific teaching assignment did not significantly affect differences in the attitudes of the participants. Music educators also indicated a willingness to include students, particularly if there were opportunities to utilize resources or participate in professional development related to working with students with special needs.

Darrow (1999) explored music educators' perceptions regarding inclusion of students with disabilities. Participants were music educators, including choral, instrumental, and general music teachers ($N = 35$). Each participant was interviewed by the researcher, and focus was placed on four distinct areas regarding inclusion: (a) critical issues, (b) teaching methodology, (c) impact on students, and (d) recommendations for new music teachers. The interviews were recorded, transcribed, and coded for themes and patterns. The results indicated that music educators recognized 13 critical issues pertinent to the inclusion of students with disabilities. These highest percentages of educators identified four critical issues: Collaboration, more

information about students and their needs, time constraints, and dealing with the differing ability levels of students with disabilities. In response to the question about teaching methodology, participants mentioned the assistance of paraprofessionals and the use of peer partners to help students with disabilities as adaptations used. They also indicated that they modified teaching materials and provided individual instruction to students with disabilities. Music educators perceived inclusion to benefit both student with disabilities and students without disabilities. Inclusion helps make students without disabilities more accepting and understanding of people, and helps students with disabilities develop important social skills. Music educators recommended that new teachers ask for assistance when needed, and that they work with all students to ensure successful inclusion. Overall, this study supports previous research in that music educators are still concerned about collaboration, adequate time, and managing different ability levels in the same classroom. It also supports previous research that reported that students with behavioral disorders, Attention Deficit Disorders, and learning disabilities are the most difficult to include. Finally, this study also supports the idea that inclusion is beneficial to everyone involved: students with disabilities, students without disabilities, and the educators themselves.

Nabb and Balcetis (2010) examined Nebraska band directors' challenges and concerns regarding the inclusion of students with physical disabilities. Band directors responded to a survey in which they indicated that each of their schools had at least one student with a physical disability. Most of the band directors were aware of adaptive instruments, but cited availability of such instruments, options for including students with physical disabilities, as well as the cost of such materials as major obstacles to successful inclusion. Even with these challenges, the band directors indicated positive benefits of inclusion in the instrumental music programs.

Scott, Jellison, Chappell, and Standridge (2007) explored previously discussed perceptions of the placement process and support, but also added a new area of exploration: parent contact and involvement. This study also indicated positive perceptions and attitudes regarding the inclusion of students with special needs. Most teachers were involved in the placement process and had positive contact with parents. Overall, the participants viewed inclusion as beneficial for students with special needs, their non-disabled peers, and the teachers themselves.

Sharrock (2007) examined the collaboration between music educators and special educators as they work with students with disabilities. Another goal of this study was to determine, what, if any role music educators (in this study, secondary choral directors) have in the placement process of students with disabilities. Participants in this study included both secondary special education teachers and choral music educators ($N = 167$) from South Carolina. Participants completed the Survey of Teacher Attitudes toward Mainstreaming (STATM) online. The survey included questions in the following areas: (a) placement, (b) teachers' perceptions, (c) training, and (d) teaching techniques. The results indicated regular inclusion of students with mild and moderate mental disabilities into secondary choral classrooms, and there was agreement that these students should have the opportunity to participate in choral programs.

Sharrock (2007) also indicated that music educators were involved in the placement of these students into choral programs, and collaboration was a valuable resource to meet the needs of these students. Both groups of teachers also demonstrated a positive attitude regarding the participation of the music educators in the IEP process and for their suggestions on how to best serve students. Both middle and high school choral educators acknowledged that having students with disabilities in chorus alters the daily procedures of the classroom. Teachers saw

collaboration as a necessary process in the successful teaching of students with disabilities. This study further supports previous research that music educators are unprepared for the challenges of teaching students with disabilities. Music educators state that they are often uninvolved in the placement process, but the results of this study indicate otherwise. Therefore, further examination is necessary, possibly with other groups of music educators and special educators. It would also benefit students and teachers if collaboration was explored and expanded upon.

Hourigan (2009) examined the perceptions of pre-service music teachers regarding fieldwork experiences. Participants included four pre-service music teachers, one in-service music teacher, one music educator teacher, and the researcher. The researcher chose a phenomenological design, with the purpose of exploring the actual experiences of the participants as they worked individually and together in a music education field experience working with children with special needs. A large state university served as the location for preparation for this study. The four undergraduate students, pre-service teachers, received placement at a local elementary school for their fieldwork experience (as part of course requirements). Within this elementary school, there were five self-contained special education classes with students in grades 1-5. Students in these classes were grouped based on various physical, cognitive, and emotional needs. The participants (university students) were asked to observe the classroom environment, assist the music teacher, plan and implement lessons, and serve as one-on-one assistants to students in the class. An orientation session was provided to the university students before their placements began. The participants also kept weekly journal entries, participated in interviews, wrote a paper, and were observed in their placements. The researcher also kept detailed field notes, including other data (communication, etc). The results indicated that the participants felt more comfortable teaching students with special needs, that

they were able to identify how students with special needs learn, and had more confidence about teaching students with various special needs. More research on how to incorporate more instruction regarding students with special needs into the preparation of music teachers should be an important area of further study.

Wilson and McCrary (1996) examined whether instruction in teaching special learners impacted the attitudes of music educators toward teaching students with special needs. The selected participants were 18 music education graduate students enrolled in a course entitled, “Music for the Special Learner.” The participants reported various levels of experience working with students with special needs. Participants completed a survey at the beginning of the semester and again at the end of the semester (pretest/posttest). During the semester, the graduate students experienced various teaching methods and opportunities regarding special learners. The results indicated that prior to instruction, students felt comfortable and were willing to work with special learners, but that they did not feel as capable. Following the semester of instruction, participants felt more capable of teaching special learners, but less comfortable and willing to teach them. The results of this study corroborate previous research that indicates that music educators see students with multiple disabilities and emotional and physical disabilities as the most difficult to work with. Additional research would be beneficial because participants in this study were not involved in hands-on teaching or fieldwork experiences. Fieldwork experiences may also influence and impact educators’ opinions and attitudes toward teaching special learners. Other methods of teaching special learners need to be examined, and further research into the relationship into the educators’ area of specialization (instrumental, choral, general, and grade levels) and their attitudes may further improve music educators’ attitudes toward teaching special learners.

Smith and Wilson (1999) tried to determine if classroom instruction and practicum experiences affected the attitudes of music educators in teaching students with disabilities. Participants were music education graduate students ($N = 18$) enrolled in a summer course regarding special learners and music. The music educators represented different grade levels (elementary/secondary) and specializations (general music, choral music, and instrumental music). More than half of the educators reported they received no formal training teaching special learners. The educators participated in coursework that included discussions, readings, guest lectures, videotaped and peer presentations, and practicum experiences. The practicum experiences took place at a facility for individuals with disabilities. Participants completed a questionnaire (Music Education in Mainstreaming Needs Assessment Questionnaire, Heine, 1996) and another survey instrument (Wilson & McCrary, 1996) on the first day of the course and again on the last day of the course. Participants also took part in in-service training prior to their interaction with students. Following the orientation and training, participants assigned (in pairs) created musical experiences for students at the facility. Participants provided four 20-minute musical experiences for students at the facility.

Smith and Wilson (1999) indicated higher scores in all areas (willingness, comfortableness, and capability) following participation in the course and practicum experience, although the only significance occurred in the capability measure. The participating educators indicated that having on-site experience (practicum) was beneficial to their understanding and attitudes regarding individuals with disabilities, and that they were glad to have the experience. Participants also indicated that following the course and practicum, they no longer needed more information regarding special learners and related topics. Overall, these results support other research that indicates that hands-on (practicum) experience with special learners improves the

attitudes of teachers who are expected and required to teach students with special needs. Further research is needed to explore the needs of different groups of music educators and to determine if other factors impact the attitudes of music educators in teaching special learners.

Kaiser and Johnson (2000) investigated whether an interactive experience impacted music majors' (some pre-service teachers) perceptions of music for deaf students. This included how prepared, comfortable, and willing they felt in working with deaf students. Participants ($N = 23$) were music education and performance majors at a university, enrolled in a brass ensemble. Participants completed a questionnaire (pretest) prior to the interactive experience. The interactive experience was attended by 10 deaf students and their teachers. The students had been prepared for the performance through class discussion on music, musical instruments, and performances. The experience included performances, visual-tactile demonstrations, and opportunities for the deaf students to play instruments and conduct the ensemble. Participants were asked to complete the same questionnaire (posttest), immediately following the experience. The results indicated that the music majors' felt both comfortable and willing to work with deaf students, but that they felt unprepared. Following the interactive experience, participants indicated that they felt more positive and more prepared for working with deaf students. The posttest questionnaire also included a question allowing the participants to make comments regarding the experience. These comments again indicated positive feelings, attitudes, and perceptions regarding the interactive experience. Implications for music education include the need for more interactive or hands-on activities involving students with disabilities and additional training, and/or revision to the current music education curricula. Today's music educators must be prepared to teach in diverse students in diverse situations. Further research is

needed to examine interactive experiences, not only for deaf students, but for students with other types of disabilities.

Cassidy and Sims (1991) examined the effects of special education labels, or absence of labels, on children's (peers) and adult's evaluations of a musical performance by a choir of handicapped students. One hundred-nineteen sixth and seventh graders, who were members of the school choir, served as peer evaluators. The adult participants were 90 undergraduate and graduate music education students at two large universities. The researchers were primarily interested in comparing the responses of evaluators who were aware of the handicapped student's labels and those who were not aware of the labels. The musical performance was a videotaped performance, and the researchers were interested to see if the videotape would provide a visual cue to identify handicaps. The responses of children and adults were also compared. The evaluation form used by all evaluators was a state choral adjudication sheet, modified for this study. Each item was based on a 5-point scale, and evaluators identified three other observations they made about the choir. Peer evaluators were asked if they would like to be a member of the group, while adult evaluators were asked if they would like to work with the group.

Evaluators watched the entire video before responding via the adjudication sheet, and attention was shown to both musical and nonmusical parts of the taped performance. The results indicated that there were significant differences between the evaluations with labels and evaluations without labels. There were also significant differences between the groups who viewed the tape, and those who only heard the tape. The groups provided with no labeling information or visual cues gave the performance the lowest ratings. Peer evaluators who were given the information about labels gave the performance higher ratings than did the peers who

did not have the labels. The adult evaluators who had no labels and no visual cues gave the highest ratings. The children (peers) seemed to be more concerned with the musical attributes of the performance than did the adults. This may be an indicator of concerns that music educators have about including students with handicaps into the music classroom. It is important that music educators be open to learning ways to integrate these students into the classroom, and more importantly, to look beyond the label.

VanWeelden and Whipple (2012) examined preservice music educators' perceptions of working with students with special needs, specifically implementing educational supports. The study focused on the students' ability to implement such strategies and which of these strategies were thought to be most beneficial for students. Participants included preservice music educators ($N = 47$) enrolled in a music methods course, including in-class instruction on appropriate musical concepts, lesson elements, teaching methods, and educational supports for working with students with special needs, and a five-week field-work experience in which the music educators taught musical concepts to students using specific educational supports. These educational supports included written words, color-coding, icons, echoing, buddy system, and visual aids. Following the fieldwork experience, the music educators were asked to complete a survey to rate the educational support in terms of how important it was for students to be successful. They were also asked to rate the same supports for implementing assessments during the music class. In addition, they were asked to rate the use of small groups or stations when completing assessments.

The results indicated that preservice music educators felt that buddy system and echoing were the most effective supports when teaching dance activities, singing activities, instrument playing activities and movement in the general music classroom. When students were

participating in musical listening activities or games, music educators felt that icons, visual aids, and color-coding were the most effective. The written word ranked as least effective except for singing activities. When ranking supports for musical ensembles, echoing ranked as the most effective, along with buddy system and visual aids. For assessments in general music, icons, small groups or stations, and visual aids ranked the highest, while small groups or stations ranked highest for assessments in the ensemble setting. The results indicated that preservice music educators are able to determine and implement appropriate educational supports for working with students with special needs, and perhaps these supports can also be beneficial for other nonmusical skills.

Charles (2010) completed an action research project. The purpose was to determine the effects of music and movement on the learning of students with special needs. There were three areas of focus in this study: students' perceptions, students' behavior, and students' academic performance. Participants in this study included five elementary school students in an Emotional/Behavior Disorder (EBD) class. Students completed a survey designed to measure their perceptions at both the beginning and the end of the twelve-week study. Reading and math classes incorporated music and movement for the duration of the study. Participants were observed daily using a researcher-created observation instrument. Data evaluated student behaviors and attendance, as well as student comments. Pre and posttests in reading and math were examined to measure students' academic performance. Results indicated that participants enjoyed reading and math more when music and movement were included in instruction. Participants also indicated that they felt happier when studying reading and math via music and movement. The observational data revealed that negative behaviors significantly decreased in both reading and math when music and movement were included in instruction. In the area of

students' academic performance, the data indicated that students' scores increased in reading, specifically regarding parts of speech; and math, specifically regarding fractions, time, and money. Overall, music and movement provide another way to enhance instruction for students with special needs. Further research may help corroborate the findings that music and movement improve student learning and attitudes.

Moss (2009) explored the quality of inclusion of students who were blind or visually impaired in instrumental music programs. The researcher sought to explore the following areas: the students' motivations for participating, their ability to develop learning strategies, the involvement of the other people in their experience, and their perceptions of social connections. Participants were blind and visually impaired students ($N = 11$). Participants completed telephone interviews with the researcher. Results indicated that students have various reasons for participating in instrumental music, such as, music, group membership, family influence, and social interactions. Students reported learning strategies such as enlarged print, Braille music, memorization, and recorded parts. Students reported that for the most part, other people contributed positively to their experience in an instrumental ensemble, but there were other times that other people negatively impacted their participation in an ensemble. Most of the participants indicated positive perceptions regarding social connections. When their needs were not met, or when there were issues with other people (mostly their peers), their experiences were not as positive. Overall, students have multiple reasons for participating in instrumental music, that they use a variety of strategies to achieve learning goals, other people help improve the quality of the inclusion experience, and the social benefits are positive. Further research is needed to explore the motivations of not only blind and visually impaired students, but other students with

disabilities. More research on the learning strategies employed by students with disabilities when participating in music classes (at all levels) may be beneficial.

Kostka (1993) compared the specific behaviors of a student with autism in a special education music class and in a regular education music class. The participant was a nine-year old male student with autism and moderate mental retardation. This student received music instruction every other day with his special education class, and because of his high level of functioning, he also received music instruction as part of a regular education fourth grade class. The music teacher was an experienced music teacher with no professional training in special education. She designed appropriate lessons for both groups of students, varying the material and processes slightly to accommodate the needs of the different groups of students. The class sessions were videotaped by a trained observer, and data was collected from six one minute excerpts from each class (3 special education classes and 3 regular education classes). The researcher used letter codes for each specific behavior, and those behaviors were coded each time they occurred in each videotaped segment.

Kostka (1993) found that specific behaviors (arm flapping, body swaying, and appropriate participation) occurred more frequently in the special education class, than in the regular education class. The time of occurrence did not significantly affect the number of occurrences. The participant was more likely to participate appropriately during listening activities, rather than other class activities such as singing, moving, or playing instruments. These results suggest that placement in a regular education class helps students with special needs develop social skills and interaction, and that they can adjust their behavior appropriately. Teachers must focus on how to teach regular education students to interact and participate appropriately in class when students with special needs are included. Further research may be

necessary to further explore the behavior of special needs students during inclusion and to examine different behaviors and their relationship to class activities. Further research might also address regular education students' opinions and attitudes regarding students with special needs. This may provide insight on how regular education students can interact and assist with students with special needs.

Chen (2007) examined various curricula, instructional methods and pedagogy, and adaptations used when teaching students with special needs. Also addressed in this study were various factors that influence how music educators deliver and provide instruction to students with special needs in an inclusive environment. Participants were certified elementary music educators in Idaho and Washington ($N = 358$, return of rate of 110 out of 358). Participants completed a web-based survey entitled, "The Inclusive Teaching and Practice Music Survey." The results indicated that most participants were female and that most had more than 10 years of teaching experience. Most of the participants indicated that they do modify instruction for students with special needs, and that needs of students dictate the changes made. Many reported that they use a variety of instructional methods and activities to ensure student learning and that they reflected on their practice to determine if students were effectively engaged in the music curriculum. Educators listed the following barriers for successful inclusion: inadequate time for preparation, collaboration (with special education teachers, personnel and families), and administrative support.

In Chen (2007), teacher attitudes were also important in successful inclusion. Students were more successful when the music teacher had a positive attitude toward inclusion. Most believed that students with special needs can learn and improve musical skills. Recommendations include further pre-service educational opportunities for working with special

learners, more collaboration among music educators and the other personnel in the school (including involvement in the IEP and placement process), additional training, different forms of assessment, and creation of a nurturing environment in which students can thrive. Further research in examining teacher attitudes toward an inclusive classroom and exploring teacher beliefs and support received when teaching special learners.

Culton (2009) investigated the perceived needs of elementary music educators in providing adequate music instruction to students with disabilities. The other purpose of this study was to examine three existing elementary music textbook series to determine which and how much information on inclusion and mainstreaming was readily available to music educators. Participants were elementary music educators in Iowa ($N = 166$, 110 returned surveys). Participants completed the Music in Mainstreaming Survey (MMS).

Analysis of the demographic data supported previous research about the lack of preparation, course work, and in-service training related to students with disabilities. The vast majority of educators (78%) reported having students with disabilities mainstreamed into their music classes. They also indicated that more information was needed about students with the following types of disabilities: emotional disabilities, behavioral disabilities, learning disabilities, mental disabilities-educable, and speech impairments. While stating that more information was needed, it was also reported that music educators were frequently serving those same five groups in their music classes. Items (needs) that were reported by 75% of the music educators became the categories for the content analysis. Those categories came from four out of five broad areas: (a) Assessing needs and setting goals for students with disabilities, (b) Classroom strategies/Instructional skills, (c) Knowledge of disabilities, and (d) Classroom

management. One broad area, Knowledge of PL 94-142, was not indicated as an area of need for these music educators (75% or greater).

Content analysis was completed on three music textbook series and included supplemental materials: *The Music Connection*, *Holt Music*, and *Music and You*. Results of the content analysis revealed that there was very little information regarding the identified topics of concern in the textbook series (14 categories had less than 1% of coverage, and 3 categories had no coverage). Further analysis revealed that *The Music Connection* had the smallest amount of coverage across all topics and grade levels. The third grade textbooks had the highest amount of overall coverage. Overall, this study supports previous research that indicates that music educators are ill-prepared for teaching and including students with disabilities in music classes. It also corroborates research that indicates music educators' needs and desires for specific types of information and strategies for successful inclusion. It is important that music educators' voices be heard regarding their need for practical and useful information in teaching students with disabilities. With proper resources and support, it is likely that music educators' attitudes would be more positive in teaching students with disabilities. There needs to be more information included in textbooks regarding this topic, given the emphasis on inclusion in today's schools and the frequency with which music educators are expected and required to teach students with disabilities.

McCord (1999) examined the behaviors and musical thought processes of students with learning disabilities as they composed music using MIDI keyboard and computer software (*Music Mania* and *Music Shop*). Participants consisted of four elementary students with learning disabilities, ages 7, 8, and 9. Since this was a qualitative study, data collection took many forms:

videotaping of students, student interviews and reflections, the students' musical composition (computer software), and observations and reflections by the researcher.

Interviews were completed before student's work with the computer software, and while they were working, they were observed and videotaped. A second interview took place following the compositional experience (six session minimum), and student compositions were analyzed. Students participated and reacted differently to the task due to individual learning disabilities and needs. It became apparent during the study that sometimes students' learning disabilities affect the music learning, but that other times, students responded positively to the tasks and program. The participants often fell into the Literal category, meaning, they played exactly what the computer asked them to play.

McCord (1999) calls on special educators to communicate and assist music educators with information, accommodations, suggestions, and strategies for teaching students with disabilities. It also calls on the music educator to find appropriate materials that students with disabilities can successfully complete. This can contribute to the students' overall interest and success in school. Technology, in this case, computers with MIDI keyboards and software can be used as a productive tool for students who often need different modalities and environments to learn. Music educators should not hesitate to be involved in the IEP and placement process, and should allow students to experiment and create their own musical compositions. Recommendations include identifying the students with disabilities and recommended modifications and accommodations, assisting students without drawing unnecessary attention to them, recognizing the power of music in the life of a child, and identifying computer software/hardware and appropriate technology that may reinforce student success in music class.

Linsenmeier (2004) examine the involvement of students with special needs in high school band and choir programs in the state of Ohio. This included the rate of involvement, or how many students with special needs participate in these programs and the level of involvement, which referred to the skill level and responsibility level required of participating students. Another purpose was to examine the characteristics of the music educators who had low or high rates and levels of involvement by students with special needs, and what the implications might be for teacher training regarding special education. The sample included band and choral directors from high schools (grades 9-12 only) with specific enrollment. The sample included 471 schools, with 942 band and choral directors. A survey was mailed out to each school, with a final return rate of 331 surveys. Telephone interviews took place with a small number of participants (those who had extremely high or extremely low rates or levels of involvement). Ten band directors and nine choral directors were interviewed. Data from the telephone interviews was coded for similarities and differences.

Linsenmeier's (2004) results indicated that students with special needs are involved in both band and choir at significantly lower rates when compared with regular education students. Students with special needs were involved in band at the rate of 5.86%. The number of regular education students in band was higher at 15.0%. The rate of involvement for students with special needs in choir was 7.0%, while the rate for regular education students was 15.82%. In both band and choir, the highest percentages of students were considered to be at the medium level of involvement. A higher number of band students were considered to be involved in lower level activities, while a higher number of choral students were considered to be involved in higher-level activities. A small percentage of choral students were involved at the low level.

The interviews indicated that many music educators have little, if any training in how to teach music to students with special needs. Educators who had high rates and levels of involvement had more experience working with students with special needs. Special education teachers provide a valuable source of information for music educators. There are many implications for this study. Students with special needs may not be recruited to the same level as their peers, their other educational opportunities may interfere, and take precedence over participation in a music ensemble, and their disabilities may hamper their ability to be successful in a music program. Another factor that may influence involvement may be the attitudes of peers and teachers and their acceptance into the group. Another way to possibly improve the enrollment of special needs students is to work towards more training and education for pre-service teachers and current music educators in the area of special education. Further research is needed to examine and improve the inclusion of students with special needs.

Johnson and Darrow (2003) examined and compared the attitudes of junior high school students from the USA and Italy regarding individuals with disabilities. This study focused on the acceptability level of various specific disabilities. The participants were junior high school students from Italy, enrolled in a music conservatory ($N = 63$) and junior high school students from the USA, enrolled in a summer music camp ($N = 166$). Participants completed a questionnaire (Disability Factor Scale (DFS), 1967) that measured the attitudes toward specific disabilities. Researchers included additional statements regarding AIDS due to the prevalence of the disease in today's culture and society. The results indicate that Italian and American students viewed the most acceptable disabilities as (a) visible scars, (b) heart conditions, (c) physical deformity, and (d) deafness. Both groups also agreed on the three least acceptable disabilities including paralysis, AIDS, and blindness. The results also indicated that female students were

more accepting of disabilities in almost every category, except for cancer. Overall, students from both countries indicated a positive attitude (in this case, acceptance) toward individuals with disabilities. It is interesting that American students did not exhibit more positive attitudes, given the legislation that has impacted education in the USA. Music educators in both countries can work towards developing and encouraging appropriate attitudes and interactions between regular education students and individuals with disabilities while also planning appropriate music instruction. An important area not addressed in this study: why particular disabilities are more or less acceptable than others. Further research could address this concern.

Mainstreaming/Inclusion Practices

Atterbury (1986) surveyed music educators from the Southern Division of MENC to assess the mainstreaming practices of the southern United States. This survey focused on three main areas: administrative support, instructional adaptations, and the impact of mainstreaming on students. Music educators in this study indicated they felt a serious lack of administrative support in working with mainstreamed students. Most of the respondents indicated that mainstreamed students were receiving a moderate level of instructional support during music classes, and educators reported that mainstreamed students were successful in music class.

Frisque, Neibur, and Humphreys (1994) explored various mainstreaming practices in the state of Arizona. Participants included 107 music educators from various backgrounds randomly selected from a list provided by the Arizona Music Educators Association. The participants completed a questionnaire regarding the mainstreaming practices in the state of Arizona. Demographic information was included in the questionnaire. The results of the questionnaire indicated that a large percentage of music educators were responsible for teaching special learners, but also that a large percentage had little or no training in teaching special learners. The

results also indicated that socialization for students often served as the main purpose of mainstreaming, rather than other stated reasons, such as musical ability or interests. Objectives for special learners were more difficult to define and the results suggest that both musical and nonmusical goals and objectives were desired and pursued. The majority of the participants indicated that they felt successful in their teaching of special learners. This study also supports previous research that indicates that students with certain types of special needs are more difficult to mainstream into the regular music classroom. Overall, music educators are responsible for educating these students with little or no training and limited resources, and are excluded from participation in the placement process. Therefore, it would seem that effective mainstreaming practices are not present in the state of Arizona.

Gavin (1983) found that music educators from Missouri reported a limited knowledge of the legislation mandating the education of students with special needs, and that the training provided was less than adequate. The study also indicated that most music educators did not have opportunities to participate in the development of the IEP, which may be a result of poor communication between music educators, special educators, and other school personnel. Music educators indicated that they were unhappy with current mainstreaming practices due to a lack of information about their roles in the development and achievement of IEP goals, the lack of information about students' disabilities and musical experiences, and the evaluation practices, or lack thereof. Educators expressed concern over the lack of preparation or professional development geared for working with students with special needs.

Haywood (2005) examined the inclusion of special needs students in choral classes and ensembles and how an inclusive music classroom can create change within the people involved (conductor and students) and the ensemble itself. Three case studies were included as part of this

qualitative study. Three distinct methodologies were used: the phenomenological approach, the ethnographic case study, and the phenomenological case study with a historical perspective. The first case study focused on the individual with special needs, the second case study focused on the ensemble/ensemble director and the researcher was an observer/participant, and the third case study focused on a choral conductor and music educator with direct experience (more than 40 years) with inclusion. The individual with special needs was interviewed, first by herself, then with her family. The second case study focused on observations of the classroom setting and a semi-structured interview with the choral conductor, and the third case study involved a semi-structured interview. In all cases, participants were encouraged to describe experiences with detail. The results indicated several initial themes: (a) the challenges and suggestions for inclusion of students with special needs, (b) the support or opposition to the inclusion of individuals with special needs, and (c) the transformation to the participants in the study. The researcher later recoded and re-categorized into the different themes, with the most dominant theme related to making music. This main theme helped change and shape the participants. Additional themes included increased knowledge of pedagogy, building relationships, and advocacy. Change in participants takes several forms: improved musical skills, improved confidence and social skills, improved teaching strategies and rehearsal techniques. Further research is needed to examine the experiences of other individuals with special needs in choral programs, explore strategies for teaching including individuals with special needs, and to determine how many programs do provide an inclusive music education for all students.

Lapka (2005) examined how students with disabilities can be included into a high school band program, and become productive members of the ensemble. This study was a case study focused on one high school band program in Illinois ($N = 29$ students), the high school band

director, and the special education teacher. In this band program, eight of the participating students were part of a special education class, while others had IEPs. Data were collected through videotaped class observations, formal and informal interviews, and focus group interviews. The interviews took place both in person and electronically.

Both the band director and the special education teacher in Lapka (2005) exhibited a positive attitude, and both expressed value in the inclusion of students with disabilities. Other students and the parents of the students with disabilities were supportive of the inclusion, and became advocates for the program. The administration of the school did not mandate the inclusion, but was aware of the process and program, and offered strong support. Both teachers indicated that they collaborated with each other, and they advocated for inclusion of the students with disabilities. Resources and music chosen accommodated players and allowed for adaptation of the parts for various ability levels. Parents were empowered through constant communication and for advocacy outside of regular school events. The participants in this study indicated they were willing to solve problems effectively and contribute to the closing of the achievement gap by being flexible and open to change. Strong contributing factors for the success of this inclusion program included co-teaching, peer tutoring, setting goals, and socialization. Overall, the program revealed that inclusion can be achieved and successful in a high school band program. The key is that the involved parties be open and receptive to the opportunities and they are willing to work together for the good of all students. Further research to study inclusion at the secondary level and collaboration between special educators and music educators would be beneficial.

Gfeller, Darrow, and Hedden (1990) explored the perceptions of the success of mainstreaming and teaching special learners in Iowa and Kansas. Participants included

elementary and secondary music educators in public schools from the states of Iowa and Kansas. Both states have similar demographics and utilize music specialists to teach music in the schools. Participants completed a questionnaire that focused on five major areas: (a) demographic information, (b) educational background with emphasis on special education, (c) instructional support provided in their schools, (d) goals and objectives for students, and (e) difficulty of mainstreaming students. Demographically, the results indicated no significant differences between teachers in Iowa and teachers in Kansas. There were slight differences in the perceptions of mainstreaming between general, choral, and instrumental teachers. In both groups, the results indicate very few educational experiences and little preparation for mainstreaming students with special needs. Music educators in this study also reported a higher level of success with more instructional support. Finally, there was agreement between the two groups that some groups of handicapped students were more difficult to mainstream than other groups of handicapped students. To ensure the effectiveness of mainstreaming, the researchers stress the importance of clear learning goals and objectives, the need for educators to receive adequate and appropriate support, and the need for better pre-service education and preparation for educators.

In 2014, VanWeelden and Whipple examined whether educators' perceived effectiveness of inclusion had changed in twenty years. A previously used survey by Gfeller, Darrow, and Hedden (1990), was sent to music educators nationwide. Results indicate changes from the results gathered twenty years ago, with music educators reporting that students with special needs are being successfully included in music classrooms, with their needs being met. They also reported that inclusion of students with special needs did not negatively impact the success of students without disabilities. Music educators also indicated they feel more comfortable

adapting and modifying classroom activities for students with special needs. Music educators are using the same standards for assessment for both special needs students and regular education students.

The literature presented here leads to the current study. It is unclear how much music educators know about the legislation and specific principles, how much they know about the different eligibility categories, and how much coursework or additional training they have had, and while music educators report positive attitudes, they still feel unprepared for the challenges of including students with special needs.

As a result, this study examined the knowledge and practices of music educators in the Southeast United States, and attempted to determine differences based on different descriptive variables. The following Method, Results, and Discussion present the process and findings.

CHAPTER III

METHOD

The purpose of this study was to determine if music educators in the Southeast United States are familiar with P. L. 94-142, which has progressed to IDEA, how students with special needs are included in music classrooms, what types of modifications or accommodations music educators are utilizing to meet the needs of these students, and if any differences exist based on selected demographic variables.

Participants

Music educators ($N = 10,666$) from Alabama, Florida, Georgia, North Carolina, South Carolina, Tennessee, and Virginia were selected from the membership lists of the National Association for Music Education (NAfME) for each state for participation in this study. The music educators included general music, band, orchestra, and choral teachers.

Questionnaire

A thorough review of related literature led to the development of a questionnaire. It was first developed in paper format (see Appendix A). Questions were transferred into *Qualtrics Software* (2015), an Internet survey system, so participants could easily complete it online.

Section 1: Demographics

The first section of the questionnaire requested demographic information including information about geography (state), primary teaching area(s) (general, band, choral, orchestral)

and level(s) (elementary, middle school, high school), degrees earned, degrees in process, and years of teaching experience.

Section 2: Training, Special Needs Knowledge and Processes

The second section of the questionnaire asked music educators about their degree coursework, professional development, personal development, and teaching practices with special needs. Specifically, there were “yes/no/not applicable” questions that asked if: (a) they had special needs coursework in any of their degrees, (b) the coursework was required to graduate, (c) the coursework had music specific content, and (d) it required in-school or other field placement experience working with special needs students. The next questions were also “yes/no” questions. They asked if: (a) music educators participated in professional development related to teaching students with special needs, (b) how long ago they had professional development, (c) they did their own research and reading about teaching special needs students, and (d) they did their own research and reading about teaching music to special needs students.

The next question asked how many classes they teach with special needs students and how many students are in those classes. Following this, there were four questions that used Likert-type rating scales. The first asked how familiar music educators were with specific special needs eligibility categories and used a scale of 1 to 5 where 1 = not familiar at all, and 5 = very familiar. The next question used the same rating scale and asked how familiar they were with specific legislative principles related to students with special needs.

Next, they were asked to how often they participated in processes and/or received teaching support when working with students with special needs. They used a scale of 1 to 5, where 1 = never and 5 = always. The final Likert-type question asked how much they agreed

with specific statements about teaching students with special needs. They used a scale of 1 to 5, where 1 = strongly disagree and 5 = strongly agree.

Section 3: Accommodations and Modifications

The final section of the questionnaire included information about which accommodations and modifications music educators use for specific students with special needs. Music educators were able to select the students' specific needs and accommodations and/or modifications used from a matrix, where they could choose each modification or accommodation utilized, or they were able to provide their own response. The last question was an open-ended question where participants could write any comments they had about the questionnaire or teaching students with special needs.

Pilot Study

Once the questionnaire was completed and edited, a pilot test of the questionnaire was conducted. The goal of the pilot study was not data analysis, but rather, expert analysis for validity and technical analysis. The researcher sent out the questionnaire to a variety of music education graduate students and public and private school music educators for technical and content clarity. Because the initial number of responses from the above list was rather low, the researcher then posted a link to the questionnaire on a closed group social media group specifically for professional community for Band Directors. This particular professional resource currently has 16,141 members from all over the United States and Canada. Finally, for content clarity, accuracy, and expert analysis validity the questionnaire was sent to music education university faculty members, music therapists/ music therapy university faculty members, exceptional children educators.

The pilot participants ($N = 83$) were asked to complete the questionnaire and provide feedback on the questions regarding clarity, accuracy, terminology, and person-first language. They were also asked to provide feedback on the technical aspects of the online survey; for example, did the software work properly and were they able to answer every question and submit it? Based on the feedback received, several changes were made to the questionnaire. The researcher clarified the eligibility areas as identified by the IDEA legislation, corrected some language to ensure “person-first” language, and adjusted some of the matrices to ensure that participants could answer the questions in their entirety.

Procedures

In order to distribute the questionnaire via the Internet, the researcher obtained email addresses for potential participants. The researcher contacted the National Association for Music Education (NAfME) for assistance. The researcher is a member of the North Carolina Music Educators Association, so she contacted Ms. Pat Hall, the Executive Director of NCMEA for assistance. She agreed to allow the researcher to use the email list with the agreement that that the list only be used for this study, and not be redistributed to anyone else. The researcher also received the Alabama membership list from an officer of the Alabama Music Educators Association (AMEA).

To obtain the email addresses from the other states, the researcher contacted the NAfME Research Assistance Program. The Research Assistance Program provides researchers access to the membership lists of NAfME based on specified criteria, using an email transmission platform. The researchers do not gain direct access to the email addresses, but NAfME distributed the emails on the behalf of those working on legitimate (Institutional Review Board-approved) research projects. The Research Assistance Order Form (see Appendix C), with a

valid Institutional Review Board (IRB) number (See Appendix A), and current membership in NAFME was submitted. The researcher identified the following criteria for sending out the emails: state (FL, GA, SC, TN, and VA), and K-12 music educators. The researcher also requested the following services: transmission to an additional 5,000 members (because $N = 7,610$ from five states), re-send to non-responders – two reminders, and rush order, (the initial email would be sent out in less than five business days). The researcher attempted to collect data before the close of the current academic year. The initial email was sent out on May 28, 2015, with a reminder sent out one week later, on June 4, 2015, and a second reminder sent out another week later, June 11, 2015, with hopes of receiving an appropriate sample.

Data Analysis, Limitations, Assumptions

Demographic data obtained from the questionnaire are nominal and are reported using descriptive statistics (frequency, percentage, etc.). It is used to make comparisons. Data from the remaining questions on the questionnaire are nominal or ordinal and nonparametric so nonparametric statistics were employed for analysis. For Research Question 1, frequencies were reported and comparisons were made using Crosstabulations and Chi-Square. Research Question 2 used descriptive analyses. Research Questions 3, 4, 5, 6, and 7 used descriptive statistics. According to Gravetter and Wallnau (2007), the Kruskal-Wallis test is designed to evaluate differences in three or more independent groups based on rank order interpretation, and serves as an alternative to the analysis of variance. In addition, they state that the Kruskal-Wallis test is similar to the Mann-Whitney U, except that it compares three or more groups (Gravetter & Wallnau, 2007). Question 8 comparisons among three or more groups were made using the Kruskal-Wallis non-parametric one-way analysis of variance, Mann Whitney U, and post hoc

Chi-Square to determine specific differences. Where two groups were compared, a Mann-Whitney U was used to determine specific differences.

A limitation for this study are that the results were based on a self-selected sample. Potentially, those who were interested in the topic completed the questionnaire, while those who were not, did not complete it. Another limitation is that the groups and subgroups for this study were uneven. As a result, caution is necessary when reading and interpreting the results, and these may not be generalizable to a larger population. An assumption in this study relates to truthfulness of answers. There is a possibility respondents were not truthful in their answers. However, there is no benefit to respondents providing false answers, so one may assume they were truthful in their answers. Another assumption is based on central limit theorem, which states that if number of participants is large enough, one may assume that the mean and standard deviation is normally distributed (Siegel & Castellan, 1988).

CHAPTER IV

RESULTS

The purpose of this study was to examine the knowledge and inclusion practices of music educators in the Southeast United States, specifically in Alabama, Florida, Georgia, North Carolina, South Carolina, Tennessee, and Virginia. The researcher used a questionnaire to collect demographic information and to assess music educators' knowledge of related legislation, student eligibility categories, accommodations and modifications used, and finally to examine music educators' attitudes about working with students with special needs.

Reliability and Response Rate

Cronbach's Alpha was calculated for subparts and the entire questionnaire. The entire questionnaire's reliability was $\alpha = .755$. The reliability for nominal questions (Q1-19 and Q24) was $\alpha = .773$, and the reliability for the scale/rating questions (Q20-23) was $\alpha = .896$.

There were a total of 10,666 potential valid participants for this study. Out of those, 1032 responded yielding a response rate of 9.68%. For a population of 10,666, the minimum sample size required is 371. Figure 1 shows the calculations completed to determine the minimum sample size for a small population (less than 100,000) based on Figure 8.7 in Rea and Parker (2014, Kindle Location 4306). This is a respondent self-selected sample.

$n = \frac{Z_a^2 (.25)(N)}{Z_a^2 (.25)(N-1)ME_p^2} = \frac{(1.96)^2 (.25)(10666)}{1.96^2 (.25)+(10666-1) (.05^2)} = \frac{10243.36}{27.6229} = 370.84 = 371$
n = sample size N = total population Z_a^2 = Z score for 95% confidence level ME_p^2 = Margin of Error (Confidence Interval, .05 assumed)

Figure 1. Sample Size Calculation

Although the intent was to survey music educators in the Southeastern United States, response rates for each state are also reported. Using the same formula as in Figure 1, minimum sample rates by state were calculated. These are in Table 1. No minimum sample sizes were met for individual states. Though central limit theorem allows one to assume a normal distribution for a large population (Siegel & Castellan, 1988), a test of normality (Kolmogorov-Smirnov, Shapiro-Wilk) was significant for all questions indicating a non-normal distribution.

Table 1

Response Rates

State	<i>Total Possible</i>	<i>Min Needed</i>	<i>Min. Required Response %</i>	<i>Actual Responses</i>	<i>Actual Response %</i>
Alabama	1252	294	23.48	198	15.81
Florida	1987	323	16.26	94	4.73
Georgia	2046	324	15.84	154	7.53
North Carolina	1804	317	17.57	296	16.41
South Carolina	1004	279	27.79	67	6.67
Tennessee	810	261	32.22	74	9.14
Virginia	1763	316	17.92	145	8.22
Other	--	--		4	--
Subtotal	10,666	--		1032	9.68
Total Working	10,666	371	3.48	1028	9.64

Questionnaire Results

The questionnaire consisted of three sections: (a) demographic information related to geography, teaching area and grade levels, degrees earned or in progress, and years of teaching experience, (b) degree coursework, professional and personal development, and familiarity with eligibility categories and legislation, and attitudinal statements, and (c) accommodations and modifications used for specific eligibility categories by music educators. Each question will be addressed individually.

Section 1: Demographics

Participants were asked several demographic questions. Table 2 and Table 3 show where participants were teaching when they completed this questionnaire.

Table 2

In Which State Do You Teach?

State	<i>f</i>	%	<i>Cum %</i>
Other States, Not in List	4	.4	.4
Alabama	198	19.2	19.6
Florida	94	9.1	28.7
Georgia	154	14.9	43.6
North Carolina	296	28.7	72.3
South Carolina	67	6.5	78.8
Tennessee	74	7.2	85.9
Virginia	145	14.1	100.0
Total	1032	100.0	

Table 3

Other Identified States

Other State	<i>f</i>	%	<i>Cum %</i>
From Selected List	1028	99.6	99.6
India (US Address)	1	.1	99.7
JORDAN	1	.1	99.8
Mississippi	1	.1	99.9
Not Listed	1	.1	100.0
Total	1032	100.0	

Table 4 and Table 5 show participants' years of teaching experience, which ranged from a pre-service music teacher to 40 years of experience. The largest percentage indicated that they had been teaching between 11 and 15 years (15.9%). The smallest number of participants (.3%) indicated they taught some other length of time not included in the list. The next smallest group was the first year teachers at 4.3%. Table 5 shows that one person has completed 40 years of teaching, one person is getting ready to complete student teaching placement, and one person

who taught in regular education classroom for 16 years, then attained music certification and has been teaching music for 3 years.

Table 4

Years Teaching Experience

Years	<i>f</i>	%	<i>Cum %</i>
This is my first year.	44	4.3	4.3
2-5	147	14.3	18.6
6-10	150	14.6	33.2
11-15	163	15.9	49.0
16-20	154	15.0	64.0
21-25	117	11.4	75.4
26-30	125	12.2	87.5
More than 30 years	125	12.2	99.7
Other	3	.3	100.0
Total	1028	100.0	

Note. *N* = 1028.

Table 5

Years Teaching Experience, Other

Teaching experience	<i>f</i>	%	<i>Cum %</i>
Participants who did not select "other."	1025	99.7	99.7
40 years	1	.1	99.8
about to do student teaching	1	.1	99.9
I taught in a regular classroom for 16 years then changed to general music K-2 after passing Praxis music content knowledge. This is my 3rd year as a music teacher.	1	.1	100.0
Total	1028	100.0	

Note. *N* = 1028.

Table 6 and Table 7 show the participants' earned degrees. According to the results, the majority of the participants indicated that they had earned a Bachelor's degree (68.1%), while 55.8% indicated they earned a Master's degree. A small number of participants earned alternative Master's degrees, or doctoral degrees. Table 8 and Table 9 show the degrees participants listed as "in progress."

Table 6

Participant Degree(s) Earned

Degree(s) Earned	<i>f</i>	<i>% of N</i>
Bachelors	700	68.1
Alt Masters	14	1.4
Masters	574	55.8
Ed.S.	48	4.7
Ph.D./D.M.A.	60	5.8
Other Degree	57	5.5

Note. *N* = 1028.

Table 7

Other Degree Participants Listed

Other Degree(s) Listed	<i>f</i>	<i>% of N</i>
Plus 30	1	.1
1 yr towards DMA	1	.1
33 post graduate hours in Education	1	.1
A.A. in Music Performance	1	.1
ABD	1	.1
Administrative Certificate	1	.1
Advanced Certificate	1	.1
ARCM, LRAM, LTCL	1	.1
Associate Degree in Nursing	1	.1
Associate's Degree	1	.1
B.Th.	1	.1
BA Music, MFA Acting	1	.1
certificate in technology	1	.1
Certification	1	.1
double license in English	1	.1
Educational Leadership Certificate	1	.1
Lateral entry certificate	1	.1
Licensure	1	.1
MA	1	.1
Master of Education - Cross Categorical	1	.1
Masters plus 30	1	.1
Music Education	1	.1
My masters is in performance, not education.	1	.1
National Board and also an Add On Licensure in ESL	1	.1
National Board and also an Add On Licensure in ESL	1	.1
National Board Certification	21	2.0

Note. Participants could select more than one item. If they wrote anything in the text box, it was recorded, even if they did not select "other." In addition, misspelled words were corrected.

(continues)

Other Degree(s) Listed	<i>f</i>	<i>% of N</i>
None	1	.1
Orff Level 1	1	.1
Plus 30	1	.1
plus 45 hours	1	.1
Post graduate certificate in school leadership	1	.1
Post graduate classes	1	.1
post graduate work	1	.1
Second Masters	1	.1
Took PhD courses	1	.1
working on dissertation	1	.1

Note. Participants could select more than one item. If they wrote anything in the text box, it was recorded, even if they did not select "other." In addition, misspelled words were corrected.

Table 8

Currently Enrolled Degree(s)

Degree	<i>f</i>	<i>%</i>	<i>Cum %</i>
Not Applicable (NA)	897	87.3	87.3
Alternative Certification Masters	1	.1	87.4
Masters	73	7.1	94.5
Education Specialist (Ed.S.)	4	.4	94.8
Doctorate (Ph.D., D.M.A., etc.)	35	3.4	98.2
Other Degree(s)	18	1.8	100.0
Total	1028	100.0	

Note. *N* = 1028.

Table 9

Currently Enrolled Degree(s) Other

Participant Other Degree	<i>f</i>	%	<i>Cum %</i>
Participants who did not select "other"	1010	98.2	98.2
Administrative Certification	1	.1	98.3
B. S. E.	1	.1	98.4
Bachelor's	1	.1	98.5
Bachelors	1	.1	98.6
English as a second language	1	.1	98.7
Enrolling in the fall in special Ed gifted certification	1	.1	98.8
Gifted Endorsement	1	.1	98.9
Graduate Certificate	1	.1	99.0
Hope to be soon!	1	.1	99.1
I am a National Board Certified Music Teacher	1	.1	99.2
Kodaly Certification JMU	1	.1	99.3
non degree seeking graduate student	1	.1	99.4
Not enrolled	2	.2	99.6
Orff Schulwerk	1	.1	99.7
Post Masters Certification in School Administration	1	.1	99.8
Retire 6/12/15	1	.1	99.9
No, I wanted to continue with an Ed.S in Music at ____, but Dr. ____ said that the State of ____ would not yet give the appropriate certification and pay for the current Ed. S program. This was in 2011. *	1	.1	100
Total	1028	100	

Note. *Participant identifying information removed.

Table 10 and Table 11 show the teaching areas and grade level(s) participants identified. A little over one third (34%) of the respondents indicated they taught pre-k music, with the next highest number at high school general music (25%). Interestingly, there were several who indicated in the “other” section that they taught collegiate level music.

Table 10

Primary Teaching Area(s)

Levels and Areas	<i>f</i>	<i>% of N</i>
PK Music	350	34.0
Elem General Music	117	11.4
MS General Music	68	6.6
HS General Music	257	25.0
MS Band	209	20.3
HS Band	183	17.8
MS Choir	181	17.6
HS Choir	66	6.4
MS Strings/Orchestra	50	4.9
HS Strings/Orchestra	171	16.6
Other	77	7.5

Note. *N* = 1028.

Table 11

Primary Teaching Area(s), Other

Other Levels and Areas Listed	<i>f</i>	<i>% of N</i>
Guitar	1	.1
5th and 6th grade chorus	1	.1
5th Grade Strings	1	.1
9th grade Arts Survey	1	.1
Adjunct University Professor of Music History, Brass Methods and Trumpet	1	.1
AP Music Theory	1	.1
AP Music Theory	4	.4
AP Music Theory, IB Music	1	.1
AP Theory	1	.1
Arts infusion	1	.1
Assist with High School Marching Band	1	.1
Beginning Band	1	.1
Chorus 4/5	1	.1
Church choir	1	.1
college	1	.1
College Adjunct Music Appreciation	1	.1
college band and administration	1	.1
College Bands	1	.1
College Choir and Voice	1	.1
College level also	1	.1
college music education/band	1	.1
College Music Education/Instrumental Methods	1	.1
Collegiate Choir	1	.1
Collegiate methods	1	.1
Community Children's Chorus	1	.1

Note. Participants could select more than one item. If they wrote anything in the text box, it was recorded, even if they did not select "other." In addition, misspelled words were corrected.

(continues)

Other Levels and Areas Listed	<i>f</i>	<i>% of N</i>
Community College	1	.1
Community Treble Choir 2nd- 12th	1	.1
Community Youth Choir; college choirs	1	.1
Coordinator of Fine Arts	1	.1
Counselor	1	.1
District-Wide Elementary Honor Chorus for 4-6	1	.1
Drum Circle (MS/HS)	1	.1
Electronic Music & Guard	1	.1
Elem. band and orchestra	1	.1
Elem. choir	1	.1
Elem. Chorus and Instrumental Ensemble	1	.1
Elem. Chorus, 4th/5th	1	.1
Elem. Strings	1	.1
Elementary and Middle School Full Orchestra	1	.1
Elementary Band	2	.2
Elementary Band and Chorus	1	.1
elementary Band, & AP Theory	1	.1
elementary choir	1	.1
Elementary choir	1	.1
Elementary Choir	2	.2
Elementary Choir (4/5)	1	.1
Elementary Choir, Middle School Ukulele ensembles	1	.1
elementary chorus	1	.1
Elementary Chorus	3	.3
elementary orchestra	1	.1
Elementary orchestra	1	.1
Elementary Orchestra	1	.1
Elementary School Band	3	.3
Elementary School Choir	1	.1
Elementary School Strings	2	.2
elementary strings	3	.3
Elementary strings	1	.1
Elementary Strings	4	.4
Elementary/middle High School Strings/Orchestra	1	.1
Elementary Strings/Orchestra	2	.2
ESE PK-22 music	1	.1
Film History	1	.1
Group Piano 6-12	1	.1
guitar	1	.1
Guitar	4	.4
Guitar and AP Theory	1	.1
Guitar, Theory, History, Technology	1	.1
Handbells	1	.1
High School & College Music Appreciation	1	.1

Note. Participants could select more than one item. If they wrote anything in the text box, it was recorded, even if they did not select "other."
In addition, misspelled words were corrected.

(continues)

Other Levels and Areas Listed	<i>f</i>	<i>% of N</i>
High School AP Theory	1	.1
High school full orchestra	1	.1
High School Guitar	2	.2
High School Jazz Band	1	.1
High School Jazz Ensemble	1	.1
High School Musical Theatre	1	.1
high school piano	1	.1
High School Piano	2	.2
High School piano class	1	.1
High School Piano Lab	1	.1
High School Theory (AP)	1	.1
Higher Ed	1	.1
HS Drama	1	.1
I retired Jan 30, 2015. My last teaching job was HS chorus	1	.1
IB Music	1	.1
IB Music Theory / Intro to Music Theory	1	.1
Jazz	1	.1
Jazz and Memphis Music	1	.1
Keyboard (Piano)	1	.1
m.s. reading	1	.1
Marching Band, Jazz Band, Musical	1	.1
Middle & High School Jazz Band	1	.1
Middle General Music	1	.1
Middle School Drama	2	.2
Middle School Drama/Musical Theater	1	.1
Middle School Guitar	2	.2
Middle School Piano and Guitar	1	.1
Middle School Piano	2	.2
Middle School Theater	1	.1
MS guitar	1	.1
MS Guitar	1	.1
Music Appreciation	1	.1
Music Theater	1	.1
music theory	1	.1
Music Theory	4	.4
musical drama, and one music sp.ed. class	1	.1
Musical Theater	1	.1
Musical Theater Director and private piano teacher	1	.1
Musical Theatre (Middle School)	1	.1
Musical Theatre, grades 6-12	1	.1
percussion class and steel drum class	1	.1
Percussion Ensemble	1	.1
Piano	1	.1
Piano/Keyboarding	1	.1
private lessons	3	.3
Private lessons and College athletic bands	1	.1
Private music lessons	1	.1
Private percussion, middle and high school and college	1	.1
private piano and voice	1	.1

Note. Participants could select more than one item. If they wrote anything in the text box, it was recorded, even if they did not select "other."
In addition, misspelled words were corrected.

(continues)

Other Levels and Areas Listed	<i>f</i>	<i>% of N</i>
Private Studio	1	.1
reading intervention	1	.1
Retired	1	.1
retired Dec. 2014	1	.1
Self-contained Special Education	1	.1
Show Choir Also	1	.1
Spanish	1	.1
Theater	1	.1
theatre	1	.1
Theatre	1	.1
Theatre 6-12	1	.1
Theatre Arts I, II, III,IV	1	.1
trumpet professor and jazz ensemble conductor	1	.1
university	2	.2
University	1	.1
University bands	1	.1
University level	1	.1
University, Music Education	1	.1
We are a K-8 school	1	.1
Youth Symphony	1	.1

Note. Participants could select more than one item. If they wrote anything in the text box, it was recorded, even if they did not select "other." In addition, misspelled words were corrected.

Section 2: Training, Special Needs Knowledge, And Processes

Participants were asked to identify whether or not they had coursework related to working with students with special needs in any of their degree programs. They were also asked if the coursework was required to graduate, if it had field placements working with special needs students, and if it had music-specific content. In addition, they were asked about professional development, personal research and/or reading on teaching students with special needs, and if they did their own research and/or reading specifically on teaching music to special needs students. Finally, they were asked to provide information about the classes they teach.

Degree and other program coursework in special needs. Over half of the participants ($n = 662$, 64.4%) indicated they had coursework related to working with students with special needs (see Table 12). Most of those who had coursework (53.4%) indicated the coursework was offered in the Bachelor's programs. One hundred-eighty participants indicated they had the

coursework in their Master's programs. Table 13 shows other degrees or licensure requirements that included coursework related to working with students with special needs.

Table 12

Degree Programs With Special Needs Coursework

Degree	<i>f</i>	<i>% of N</i>
Bachelors	549	53.4
Alt Masters	10	1.0
Masters	180	17.5
Ed.S.	15	1.5
Doctorate	11	1.1
Other	39	3.8

Note. Participants could select more than one choice.

Table 13

Other Degrees or Programs With Special Needs Coursework

Other Programs	<i>f</i>	<i>% of N</i>
Plus 30	1	.1
ABC Certification	1	.1
Administration	1	.1
Bachelor of Music Therapy	1	.1
Bachelors of Music Therapy	1	.1
Certification	1	.1
Certification new state	1	.1
Collaborated with special needs Teachers and designed a program for Special Needs Students	1	.1
Courses towards alternative certification program	1	.1
District training for certification	1	.1
For certification in Maryland at the time. I took a graduate school level course in understanding the special education child's needs	1	.1
Gifted and Talented Endorsement	1	.1
Graduate level class that was not a part of a degree program (professional development)	1	.1
Graduate Licensure Work	1	.1
I've taken classes but no degree in service workshops	1	.1
Lateral entry classes	1	.1
Master of Education Cross Categorical Certification	1	.1
music ed certification course	1	.1
Licensure	1	.1
Licensure Program	1	.1
Master of Education Cross Categorical Certification	1	.1
music ed certification course	1	.1

Note. Participants could select more than one item. If they wrote anything in the text box, it was recorded, even if they did not select "other." In addition, misspelled words were corrected.

(continues)

Other Programs	<i>f</i>	<i>% of N</i>
Music Therapy & Ed	1	.1
NC Teaching Fellows	1	.1
Non Degree	1	.1
non degree seeking graduate studies	1	.1
Professional development for licensing	1	.1
Professional Learning	1	.1
recertification course	1	.1
Recertification Course	1	.1
Regional Service Agency	1	.1
Required for certification in GA.	1	.1
summer class for recertification	1	.1
Summer classes past bachelors	1	.1
TAPP program	1	.1
Teaching Certificate Track	1	.1
Or After graduating with a BME, I did not teach or apply to get my certificate. Years later, I returned to school for one year to "bring my certificate up-to-date." The course was required for a degree then, but not at the time I originally graduated.	1	.1

Note. Participants could select more than one item. If they wrote anything in the text box, it was recorded, even if they did not select "other." In addition, misspelled words were corrected.

Courses required to graduate. Of the 662 participants who had coursework, all 662 also indicated that the coursework was required to graduate with the degree (see Table 14).

Table 15 shows the other degrees that had related coursework.

Table 14

Coursework Required for Graduation?

Degree	<i>f</i>	<i>% of N</i>
No Degree Required Coursework	90	8.8
Bachelors	484	47.1
Alt Masters	12	1.2
Masters	12	1.2
Ed.S.	129	12.5
Ph.D./D.M.A.	6	.6
Other Degree	19	1.8

Note. Participants could select more than one choice.

Table 15

Coursework Required for Graduation - Other

Degree, Other	<i>f</i>	<i>% of N</i>
ABC required	1	.1
Administration	1	.1
Bachelor of Music Therapy	1	.1
certificate renewal	1	.1
Certification in Maryland at the time I was teaching there.	1	.1
Graduate Licensure Work	1	.1
Licensure	1	.1
Licensure Program	1	.1
Master of Education Cross Cat	1	.1
music ed certification	1	.1
NC Teaching Fellows	1	.1
not a special requirement but taught along with other topics	1	.1
required for license in NC	1	.1
Required for licensing	1	.1
Teacher Certification	1	.1
Teaching Certificate	1	.1
Undergrad courses	1	.1
Yes. I received an undergraduate degree in Music Therapy from ECU	1	.1

Note. Participants could select more than one item. If they wrote anything in the text box, it was recorded, even if they did not select "other." In addition, misspelled words were corrected.

Courses required to graduate, music-specific content. Just over half of the 662 who reported graduation-required coursework ($n = 393$) said their coursework had music specific content. Table 16 shows additional degrees or licensure requirements that had music specific content.

Table 16

Other Degrees or Programs with Music Specific Coursework

Degree, Other	<i>f</i>	<i>% of N</i>
Bachelors of Music Therapy	1	.1
BME YES	1	.1
I don't remember	1	.1
Lateral Entry classes	1	.1
Licensure	1	.1
Music Therapy	1	.1
Music Therapy program I studied prior to completion of Bachelors	1	.1
My degree is in music. My coursework for special needs was in a reading skills class that was required for my music major.	1	.1
No	2	.2
No	1	.1
No Special Needs coursework involved music content.	1	.1
Teaching Certificate in Music K-12	1	.1
Yes. It was an online class for teaching music to students with special needs (taught by Alice Hammel)	1	.1

Note. Participants could select more than one item. If they wrote anything in the text box, it was recorded, even if they did not select "other." In addition, misspelled words were corrected.

Courses required to graduate, field-placements. Participants were asked if any of the coursework required field placements working with students with special needs.

Overwhelmingly, their coursework did not involve field placements (45.1%) related to working with special needs (Table 17 and Table 18). Most often, coursework in the Bachelor's degree required a field placement ($n = 166$, 16.1%), followed by coursework in the Master's degree ($n = 36$, 3.5%).

Table 17

Degrees with Special Needs Field Placements

Degree	<i>f</i>	<i>% of N</i>
No Degree Required Field Placement(s)	464	45.1
Bachelors	166	16.1
Alt Masters	5	.5
Masters	36	3.5
Ed.S.	5	.5
Ph.D./D.M.A.	1	.1
Other Degree	10	1.0

Note. Participants could select more than one choice.

Table 18

Degrees with Special Needs Field Placements - Other

<i>Degree</i>	<i>f</i>	<i>% of N</i>
Administration	1	.1
BME YES	1	.1
Graduate Licensure Work	1	.1
I did not graduate with this degree, but took courses toward Education of the Hearing Impaired as well.	1	.1
I don't remember	1	.1
lateral entry class, special needs students are mainstreamed into regular classes in elementary	1	.1
Master of Education- Cross Cat	1	.1
Music Therapy practicums	1	.1
Music Therapy Program in which I was enrolled while completing undergraduate work	1	.1
No	1	.1

Note. Participants could select more than one choice. If they wrote anything in the text box, it was recorded, even if they did not select "other."

Professional development. Participants were also asked if they attended any professional development related to working with students with special needs (see Table 19). Over half ($n = 668$, 65%) indicated that they had attended some type of professional development related to teaching students with special needs. Out of that group, 220 (21.4%) had it within the last year, 159 (15.5%) had it 1-2 years ago, 76 (7.4%) had it 2-3 years ago, 44 (4.3%) had it 3-4 years ago, and the same number had it 4-5 years ago. Interestingly, 135 (13.1%) had professional development more than 5 years ago (see Table 20).

Table 19

Attended Professional Development about Special Needs

	<i>f</i>	<i>% of N</i>	<i>Cum %</i>
Yes	668	65.0	65.0
No	360	35.0	100.0
Total	1028	100.0	

Note. $N = 1028$

Table 20

How Long Ago was the Professional Development?

	<i>f</i>	<i>% of N</i>	<i>Cum %</i>
I have not attended any within the last year	350	34.0	34.0
1-2 years ago	220	21.4	55.4
2-3 years ago	159	15.5	70.9
3-4 years ago	76	7.4	78.3
4-5 years ago	44	4.3	82.6
more than 5 years ago	44	4.3	86.9
Total	135	13.1	100.0
Total	1028	100.0	

Note. *N* = 1028

Personal research and reading. Participants were asked if they did any of their own research and reading on working with students with special needs. Almost 700 ($n = 699$, 68%) said they completed their own research and reading about teaching students with special needs (see Table 21). In addition, 688 (66.8%) said they completed their own research and reading specifically regarding teaching music to students with special needs (see Table 22).

Table 21

Self-Research on Teaching Special Needs Students

	<i>f</i>	<i>% of N</i>	<i>Cum %</i>
Yes	699	68.0	68.0
No	329	32.0	100.0
Total	1028	100.0	

Note. *N* = 1028

Table 22

Self-Research on Teaching MUSIC to Special Needs Students

	<i>f</i>	<i>% of N</i>	<i>Cum %</i>
Yes	688	66.9	66.9
No	340	33.1	100.0
Total	1028	100.0	

Note. *N* = 1028

Classes taught and special needs students. Participants were asked how many classes a day they taught with students with special needs, and how many students with special needs were served within those classes. The majority of participants taught 1 class with students with special needs ($n = 182$, 28.7%), followed by those who taught two classes ($n = 173$, 45.5%), and surprisingly, some participants reported teaching 6 classes a day ($n = 159$, 15.5%) including students with special needs (see Table 23).

The overwhelming majority reported that the lowest number of students with special needs in a single class was 1-2 students ($n = 736$, 71.6%), while 132 participants (12.8%) reported 3-4 students in a single class (see Table 24).

Table 23

Number of classes you teach each day with special needs students

Number of classes	<i>f</i>	%	<i>Cum %</i>
Not Applicable	113	11.0	11.0
1	182	17.7	28.7
2	173	16.8	45.5
3	155	15.1	60.6
4	101	9.8	70.4
5	81	7.9	78.3
6	159	15.5	93.8
7	24	2.3	96.1
more than 7	40	3.9	100.0
Total	1028	100.0	

Note. $N = 1028$

Table 24

Lowest number of special needs students in a single class

Lowest Number of Students	<i>f</i>	%	<i>Cum %</i>
Not Applicable	111	10.8	10.8
1-2	736	71.6	82.4
3-4	132	12.8	95.2
5-6	31	3.0	98.2
7-8	8	.8	99.0
9-10	3	.3	99.3
11 or more	7	.7	100.0
Total	1028	100.0	

Note. $N = 1028$

Participants were asked to identify the highest number of students with special needs in a single class (see table 25). The largest number of participants ($n = 262$, 25.5%) reported that they taught 3-4 students with special needs in a single class, followed closely by those who taught 1-2 students in a single class ($n = 232$, 22.6%). Participants were asked if they taught a self-contained music class (see Table 26). Most ($n = 898$, 87.4%) indicated that they were not required to teach a self-contained music class. Of those who taught a self-contained class ($n = 130$, 12.6%), 18 (1.8%) reported a total of 10 students in the self-contained class, 15 (1.5%) reported a total of 8 students, and 12 (1.2%) reported a total of 6 students in the self-contained class (see Table 27).

Table 25

Highest Number Of Special Needs Students In A Single Class

Highest Number of Students	<i>f</i>	%	<i>Cum %</i>
Not Applicable	106	10.3	10.3
1-2	232	22.6	32.9
3-4	262	25.5	58.4
5-6	188	18.3	76.7
7-8	92	8.9	85.6
9-10	81	7.9	93.5
11 or more	67	6.5	100.0
Total	1028	100.0	

Note. N = 1028

Table 26

Do You Teach a Self-Contained Music Class?

Answer	<i>f</i>	%	<i>Cum %</i>
Yes	130	12.6	12.6
No	898	87.4	100.0
Total	1028	100.0	

Note. N = 1028

Table 27

How many students in self-contained music class?

Number of students	<i>f</i>	%	<i>Cum %</i>
Participants who said no	898	87.4	87.4
1	6	.6	87.9
2	2	.2	88.1
3	2	.2	88.3
4	4	.4	88.7
5	6	.6	89.3
6	12	1.2	90.5
7	7	.7	91.1
8	15	1.5	92.6
9	3	.3	92.9
10	18	1.8	94.6
11	5	.5	95.1
12	13	1.3	96.4
13	2	.2	96.6
14	1	.1	96.7
15	6	.6	97.3
16	1	.1	97.4
18	3	.3	97.7
20	1	.1	97.8
21	1	.1	97.9
25	2	.2	98.1
80	1	.1	98.2
4-11	1	.1	98.2
4-12	1	.1	98.3
5-6	1	.1	98.4
6-7	1	.1	98.5
6-9	1	.1	98.6
6-10	1	.1	98.7
7-8	1	.1	98.8
7-10	2	.2	99.0
9-10	1	.1	99.1
10-12	2	.2	99.3
15-24	1	.1	99.4
25-30	1	.1	99.5
No	1	.1	99.6
3 different classes, 6-8 in each class	1	.1	99.7
6-10 all of my classes are self contained	1	.1	99.8
I teach 1 class mainstreamed per week. No place to say that.	1	.1	99.9
I teach at a center school so they are all special needs students that attend as a class with their classroom teacher	1	.1	100.0
	1028	100.0	

Note. *N* = 1028

Familiarity with special needs specific conditions, principles of IDEA legislation.

Participants were asked to rate how familiar they were with the different eligibility categories as identified by IDEA. They were also asked about their familiarity with legislation regarding special needs students.

Familiarity with conditions. The ratings ranged from 1 (not familiar at all) to 5 (very familiar). Overall, participants had at least some knowledge of specific learning disabilities, with most participants rating their familiarity as a “3” ($n = 353, 35.1\%$) or “4” ($n = 268, 26.6\%$). In the category of speech/language impairments, participants also indicated a familiarity of “3” ($n = 313, 30.4\%$) or “4” ($n = 243, 23.6\%$).

For the category of *visual impairments*, the largest number of participants indicated a familiarity of “3” ($n = 275, 26.8\%$), but more participants indicated less familiarity (2, $n = 267, 26\%$, or 1, $n = 184, 17.9\%$). More participants indicated a “2” ($n = 284, 27.6\%$) when asked about their familiarity with hearing impairments. The next largest response was “3” ($n = 273, 26.6\%$). A small percentage ($n = 87, 8.5\%$) indicated “5,” very familiar.

Participants were less familiar with *orthopedic impairments such as cerebral palsy, spina bifida, or amputations*, with 273 responses indicating a “2” (26.6%), 251 responses indicating a “1” (24.4%), and 250 responses indicating a “3” (24.3%). In the area of *other health impairments*, most indicated they were at least somewhat familiar with a rating of “3” ($n = 280, 27.2\%$), more participants gave a rating of “4” ($n = 289, 28.1\%$), and 149 participants (14.5%) indicated they were very familiar with *other health impairments*. When asked to rate their familiarity with *autism*, participants indicated they were “4,” familiar ($n = 334, 32.5\%$), or “5,” very familiar ($n = 272, 26.5\%$). This category had the smallest number ($n = 48, 4.7\%$) of those indicating they were not familiar at all.

Participants indicated that they were at least somewhat familiar with *multiple disabilities* ($n = 323, 31.4\%$), and more participants indicated less familiarity in this category with 284 responses (27.6%) indicating a “2” and 164 responses indicating a “1” (16%), not familiar at all. The largest number of participants ($n = 326, 31.7\%$) were familiar with *developmental delay*, while the next largest response was a “2” ($n = 230, 22.4\%$). The majority of participants ($n = 400, 38.9\%$) indicated they were not familiar at all with *traumatic brain injury*, followed by a rating of “2” ($n = 294, 28.6\%$). The category of *deaf-blindness* also had the largest number of responses ($n = 412, 40.1\%$) indicating “not familiar at all.” The largest number of respondents indicated they were somewhat familiar with the category of *emotional disturbance* ($n = 284, 27.6\%$). Table 28 shows the descriptive statistics for this question and Table 29 shows the full results.

Table 28

Descriptive Statistics: Familiarity with Special Needs Conditions

Item	N	Mean	SD	Min	Max	Percentiles		
						25th	50th (Median)	75th
Specific Learning Disability	1007	3.28	1.118	1	5	3	3	4
Speech or Language Impairments	1007	3.14	1.173	1	5	2	3	4
Visual Impairments (Blindness, Low Vision, Strabismus, Nystagmus)	1007	2.76	1.242	1	5	2	3	4
Hearing Impairments (Conductive, Sensorineural)	1007	2.77	1.192	1	5	2	3	4
Orthopedic Impairments (cerebral palsy, spina bifida, amputations)	1007	2.54	1.229	1	5	2	2	3
Other Health Impairments (asthma, cystic fibrosis, epilepsy)	1007	3.19	1.204	1	5	2	3	4
Autism	1007	3.65	1.14	1	5	3	4	5
Multiple Disabilities	1007	2.7	1.142	1	5	2	3	3
Developmental Delay	1007	2.91	1.186	1	5	2	3	4
Traumatic Brain Injury	1007	2.08	1.125	1	5	1	2	3
Deaf-Blindness	1007	2.07	1.145	1	5	1	2	3
Emotional Disturbance	1007	3.1	1.187	1	5	2	3	4

Table 29

Familiarity with Special Needs Conditions

Areas	Rating	<i>f</i>	%	<i>Valid %</i>	<i>Valid Cum %</i>
Specific Learning Disability	Not Familiar At All	71	6.9	7.1	7.1
	2	159	15.5	15.8	22.8
	3	353	34.3	35.1	57.9
	4	268	26.1	26.6	84.5
	Very Familiar	156	15.2	15.5	100.0
	Total	1007	98.0	100.0	
	Missing	21	2.0		
	Total	1028	100.0		
Speech or Language Impairments	Not Familiar At All	91	8.9	9.0	9.0
	2	215	20.9	21.4	30.4
	3	313	30.4	31.1	61.5
	4	243	23.6	24.1	85.6
	Very Familiar	145	14.1	14.4	100.0
	Total	1007	98.0	100.0	
	Missing	21	2.0		
	Total	1028	100.0		
Visual Impairments (Blindness, Low Vision, Strabismus, Nystagmus)	Not Familiar At All	184	17.9	18.3	18.3
	2	267	26.0	26.5	44.8
	3	275	26.8	27.3	72.1
	4	172	16.7	17.1	89.2
	Very Familiar	109	10.6	10.8	100.0
	Total	1007	98.0	100.0	
	Missing	21	2.0		
	Total	1028	100.0		
Hearing Impairments (Conductive, Sensorineural)	Not Familiar At All	163	15.9	16.2	16.2
	2	284	27.6	28.2	44.4
	3	273	26.6	27.1	71.5
	4	200	19.5	19.9	91.4
	Very Familiar	87	8.5	8.6	100.0
	Total	1007	98.0	100.0	
	Missing	21	2.0		
	Total	1028	100.0		
Orthopedic Impairments (cerebral palsy, spina bifida, amputations)	Not Familiar At All	251	24.4	24.9	24.9
	2	273	26.6	27.1	52.0
	3	250	24.3	24.8	76.9
	4	158	15.4	15.7	92.6
	Very Familiar	75	7.3	7.4	100.0
	Total	1007	98.0	100.0	
	Missing	21	2.0		
	Total	1028	100.0		

(continues)

Areas	Rating	<i>f</i>	%	<i>Valid %</i>	<i>Valid Cum %</i>
Other Health Impairments (asthma, cystic fibrosis, epilepsy)	Not Familiar At All	107	10.4	10.6	10.6
	2	182	17.7	18.1	28.7
	3	280	27.2	27.8	56.5
	4	289	28.1	28.7	85.2
	Very Familiar	149	14.5	14.8	100.0
	Total	1007	98.0	100.0	
	Missing	21	2.0		
	Total	1028	100.0		
Autism	Not Familiar At All	48	4.7	4.8	4.8
	2	124	12.1	12.3	17.1
	3	229	22.3	22.7	39.8
	4	334	32.5	33.2	73.0
	Very Familiar	272	26.5	27.0	100.0
	Total	1007	98.0	100.0	
	Missing	21	2.0		
	Total	1028	100.0		
Multiple Disabilities	Not Familiar At All	164	16.0	16.3	16.3
	2	284	27.6	28.2	44.5
	3	323	31.4	32.1	76.6
	4	161	15.7	16.0	92.6
	Very Familiar	75	7.3	7.4	100.0
	Total	1007	98.0	100.0	
	Missing	21	2.0		
	Total	1028	100.0		
Developmental Delay	Not Familiar At All	139	13.5	13.8	13.8
	2	230	22.4	22.8	36.6
	3	326	31.7	32.4	69.0
	4	204	19.8	20.3	89.3
	Very Familiar	108	10.5	10.7	100.0
	Total	1007	98.0	100.0	
	Missing	21	2.0		
	Total	1028	100.0		
Traumatic Brain Injury	Not Familiar At All	400	38.9	39.7	39.7
	2	294	28.6	29.2	68.9
	3	189	18.4	18.8	87.7
	4	85	8.3	8.4	96.1
	Very Familiar	39	3.8	3.9	100.0
	Total	1007	98.0	100.0	
	Missing	21	2.0		
	Total	1028	100.0		
Deaf-Blindness	Not Familiar At All	412	40.1	40.9	40.9
	2	284	27.6	28.2	69.1
	3	179	17.4	17.8	86.9
	4	91	8.9	9.0	95.9
	Very Familiar	41	4.0	4.1	100.0
	Total	1007	98.0	100.0	
	Missing	21	2.0		
	Total	1028	100.0		

(continues)

Areas	Rating	<i>f</i>	%	<i>Valid %</i>	<i>Valid Cum %</i>
Emotional Disturbance	Not Familiar At All	94	9.1	9.3	9.3
	2	241	23.4	23.9	33.3
	3	284	27.6	28.2	61.5
	4	247	24.0	24.5	86.0
	Very Familiar	141	13.7	14.0	100.0
	Total	1007	98.0	100.0	
	Missing	21	2.0		
	Total	1028	100.0		

Familiarity with legal principles. Participants were asked if they were familiar with IDEA, and 54.9% ($n = 551$) reported they were “not familiar at all.” When asked if they were familiar with the zero-reject principle, 762 (76%) participants reported being “not familiar at all,” while only 29 (2.9%) reported being “very familiar” (see Table 30). When asked about the nondiscriminatory evaluation principle, still the majority ($n = 589$, 58.7%) reporting being “not familiar at all,” while slightly more ($n = 51$, 5.1%) reported being “very familiar.” Still yet, when asked about the appropriate education principle, 518 (51.6%) reported being “not familiar at all,” while 79 (7.9%) reported being “very familiar.” The least restrictive environment principle was the most familiar to the participants with 250 (24.9%) reporting they were “very familiar.” However, the same number ($n = 250$) reported being “not familiar at all.”

With the *procedural due process principle*, 450 participants reported being “not familiar at all,” but the number of those reporting they were “very familiar” was around 10% ($n = 105$). Participants reported being “not familiar at all” ($n = 448$, 44.7%) with the *parent and student participation principle*, while 105 reported being “very familiar.” Overwhelmingly, music educators in the Southeast reported being unfamiliar with the IDEA legislation, and especially the specific principles outlined in the law.

When asked about other processes associated with working with students with special needs, the responses were different. The first question asked if music educators were familiar

with the actual *definition of an Individualized Education Program (IEP)*, and the majority ($n = 386, 38.5\%$) reported being “very familiar,” while only 135 (13.5%) reported being “not familiar at all.” The second question asked if music educators were familiar with the *IEP Process*. The majority ($n = 333, 33.2\%$) reported being very familiar, while only 94 (9.4%) reported being “not familiar at all.” Table 30 shows the descriptive statistics for this question, and Table 31 shows the full results.

Table 30

Descriptive Statistics: Familiarity with Legislative Principles

Item	N	Mean	SD	Min	Max	Percentiles		
						25th	50th (Median)	75th
IDEA	1003	2.20	1.505	1	5	1.00	1.00	4.00
Zero Reject Principle	1003	1.47	.977	1	5	1.00	1.00	1.00
Nondiscriminatory Evaluation Principle	1003	1.84	1.199	1	5	1.00	1.00	3.00
Appropriate Education Principle	1003	2.08	1.343	1	5	1.00	1.00	3.00
Least Restrictive Environment Principle	1003	3.09	1.516	1	5	2.00	3.00	4.00
Procedural Due Process Principle	1003	2.32	1.422	1	5	1.00	2.00	3.00
Parent And Student Participation Principle	1003	2.28	1.410	1	5	1.00	2.00	3.00
Definition Of An Individualized Education Program	1003	3.69	1.389	1	5	3.00	4.00	5.00
Individualized Education Program Process	1003	3.65	1.294	1	5	3.00	4.00	5.00

Table 31

Familiarity with Special Needs Legislation

Areas	Rating	<i>f</i>	%	<i>Valid %</i>	<i>Valid Cum %</i>
IDEA	Not Familiar At All	551	53.6	54.9	54.9
	2	82	8.0	8.2	63.1
	3	118	11.5	11.8	74.9
	4	126	12.3	12.6	87.4
	Very Familiar	126	12.3	12.6	100.0
	Total	1003	97.6	100.0	
	Missing	25	2.4		
	Total	1028	100.0		
Zero Reject Principle	Not Familiar At All	762	74.1	76.0	76.0
	2	107	10.4	10.7	86.6
	3	68	6.6	6.8	93.4
	4	37	3.6	3.7	97.1
	Very Familiar	29	2.8	2.9	100.0
	Total	1003	97.6	100.0	
	Missing	25	2.4		
	Total	1028	100.0		
Nondiscriminatory Evaluation Principle	Not Familiar At All	589	57.3	58.7	58.7
	2	160	15.6	16.0	74.7
	3	131	12.7	13.1	87.7
	4	72	7.0	7.2	94.9
	Very Familiar	51	5.0	5.1	100.0
	Total	1003	97.6	100.0	
	Missing	25	2.4		
	Total	1028	100.0		
Appropriate Education Principle	Not Familiar At All	518	50.4	51.6	51.6
	2	150	14.6	15.0	66.6
	3	146	14.2	14.6	81.2
	4	110	10.7	11.0	92.1
	Very Familiar	79	7.7	7.9	100.0
	Total	1003	97.6	100.0	
	Missing	25	2.4		
	Total	1028	100.0		
Least Restrictive Environment Principle	Not Familiar At All	250	24.3	24.9	24.9
	2	109	10.6	10.9	35.8
	3	191	18.6	19.0	54.8
	4	203	19.7	20.2	75.1
	Very Familiar	250	24.3	24.9	100.0
	Total	1003	97.6	100.0	
	Missing	25	2.4		
	Total	1028	100.0		

(continues)

Areas	Rating	<i>f</i>	%	<i>Valid %</i>	<i>Valid Cum %</i>
Procedural Due Process Principle	Not Familiar At All	450	43.8	44.9	44.9
	2	135	13.1	13.5	58.3
	3	173	16.8	17.2	75.6
	4	140	13.6	14.0	89.5
	Very Familiar	105	10.2	10.5	100.0
	Total	1003	97.6	100.0	
	Missing	25	2.4		
	Total	1028	100.0		
Parent And Student Participation Principle	Not Familiar At All	448	43.6	44.7	44.7
	2	163	15.9	16.3	60.9
	3	156	15.2	15.6	76.5
	4	131	12.7	13.1	89.5
	Very Familiar	105	10.2	10.5	100.0
	Total	1003	97.6	100.0	
	Missing	25	2.4		
	Total	1028	100.0		
Definition Of An Individualized Education Program	Not Familiar At All	135	13.1	13.5	13.5
	2	69	6.7	6.9	20.3
	3	149	14.5	14.9	35.2
	4	264	25.7	26.3	61.5
	Very Familiar	386	37.5	38.5	100.0
	Total	1003	97.6	100.0	
	Missing	25	2.4		
	Total	1028	100.0		
Individualized Education Program Process	Not Familiar At All	94	9.1	9.4	9.4
	2	110	10.7	11.0	20.3
	3	182	17.7	18.1	38.5
	4	284	27.6	28.3	66.8
	Very Familiar	333	32.4	33.2	100.0
	Total	1003	97.6	100.0	
	Missing	25	2.4		
	Total	1028	100.0		

Participation in special needs student processes. Research question 4 asked participants how often they participate in processes and/or receive instructional support for working with students with special needs. Most music educators reported *participating in the IEP process* “some of the time” ($n = 338, 33.9\%$), while the next largest response was “never” ($n = 212, 21.2\%$). However, when asked if they *receive information about individual students and their needs*, the majority ($n = 453, 45.4\%$) said they “always” receive the information, while only 25 (2.5%) said they “never” receive the information.

The largest number of participants ($n = 463$, 46.4%) also reported that they “always” *provided necessary accommodations and modifications*, and were *comfortable doing so* ($n = 400$, 40.1%). Most music educators felt *confident in their abilities* “some of the time” ($n = 349$, 35%), almost the same number indicated “almost always” ($n = 347$, 34.8%) and about 15% less marked “always” ($n = 207$, 20.7%). When asked if they *received instructional support from a paraprofessional or other instructional aid*, 272 (27.3%) said they “sometimes” receive help, while 260 (26.1%) said they “never” receive help. Table 32 shows descriptive statistics for each item and Table 33 shows the full results.

Table 32

Descriptive Statistics: Frequency of Participation in Processes

	N	Mean	SD	Min	Max	Percentiles		
						25th	50th (Median)	75th
I participate in the IEP process.	998	2.82	1.326	1	6	2.00	3.00	4.00
I receive information about individual students and their needs.	998	4.09	1.075	1	6	3.00	4.00	5.00
I provide accommodations or modifications.	998	4.22	.976	1	6	4.00	4.00	5.00
I am comfortable providing accommodations or modifications.	998	4.11	.984	1	6	3.00	4.00	5.00
I am confident in my abilities with students with special needs.	998	3.70	.970	1	6	3.00	4.00	4.00
I have assistance from a paraprofessional or other instructional aid.	998	2.76	1.448	1	6	1.00	3.00	4.00

Table 33

Frequency of Participation in Special Needs Student Activities

Statement	Rating	<i>f</i>	%	<i>Valid %</i>	<i>Valid Cum %</i>
I participate in the IEP process.	Never	212	20.6	21.2	21.2
	Almost Never	178	17.3	17.8	39.1
	Sometimes	338	32.9	33.9	72.9
	Almost Always	143	13.9	14.3	87.3
	Always	105	10.2	10.5	97.8
	NA	22	2.1	2.2	100.0
	Total	998	97.1	100.0	
	Missing	30	2.9		
	Total	1028	100.0		
I receive information about individual students and their needs.	Never	25	2.4	2.5	2.5
	Almost Never	64	6.2	6.4	8.9
	Sometimes	180	17.5	18.0	27.0
	Almost Always	264	25.7	26.5	53.4
	Always	453	44.1	45.4	98.8
	NA	12	1.2	1.2	100.0
	Total	998	97.1	100.0	
	Missing	30	2.9		
	Total	1028	100.0		
I provide accommodations or modifications.	Never	16	1.6	1.6	1.6
	Almost Never	33	3.2	3.3	4.9
	Sometimes	174	16.9	17.4	22.3
	Almost Always	291	28.3	29.2	51.5
	Always	463	45.0	46.4	97.9
	NA	21	2.0	2.1	100.0
	Total	998	97.1	100.0	
	Missing	30	2.9		
	Total	1028	100.0		
I am comfortable providing accommodations or modifications.	Never	19	1.8	1.9	1.9
	Almost Never	31	3.0	3.1	5.0
	Sometimes	207	20.1	20.7	25.8
	Almost Always	322	31.3	32.3	58.0
	Always	400	38.9	40.1	98.1
	NA	19	1.8	1.9	100.0
	Total	998	97.1	100.0	
	Missing	30	2.9		
	Total	1028	100.0		
I am confident in my abilities with students with special needs.	Never	19	1.8	1.9	1.9
	Almost Never	64	6.2	6.4	8.3
	Sometimes	349	33.9	35.0	43.3
	Almost Always	347	33.8	34.8	78.1
	Always	207	20.1	20.7	98.8
	NA	12	1.2	1.2	100.0
	Total	998	97.1	100.0	
	Missing	30	2.9		
	Total	1028	100.0		

(continues)

Statement	Rating	<i>f</i>	%	<i>Valid %</i>	<i>Valid Cum %</i>
I have assistance from a paraprofessional or other instructional aid.	Never	260	25.3	26.1	26.1
	Almost Never	189	18.4	18.9	45.0
	Sometimes	272	26.5	27.3	72.2
	Almost Always	123	12.0	12.3	84.6
	Always	118	11.5	11.8	96.4
	NA	36	3.5	3.6	100.0
	Total	998	97.1	100.0	
	Missing	30	2.9		
	Total	1028	100.0		

Views on student participation in classes. Most music educators agreed ($n = 552$, 55.6%) with the statement, *Students with special needs participate well in music*. A very small number ($n = 28$, 2.8%) “disagreed,” while only five (.5%) “strongly disagreed.” Most ($n = 521$, 52.5%) also agreed that *students with special needs are accepted by their peers*. However, the largest number ($n = 438$, 44.2%) indicated a neutral opinion regarding the statement, *Students with special needs are disruptive in music classes*. Most of the participants ($n = 448$, 45.2%) also “disagreed” with the statement, *Students with special needs always require modifications*. On the opposite statement, *Students with special needs never require modifications*, music educators also disagreed ($n = 510$, 51.4%).

When asked to rate whether *students with special needs were difficult to teach*, music educators ($n = 376$, 37.9%) disagreed or they chose the neutral response ($n = 390$, 39.3%). When asked to rate the statement, *Students with special needs do not belong in music classes*, the overwhelming majority ($n = 649$, 65%) indicated “Strongly Disagree,” while 259 (26.1%) chose “Disagree.” Only 77 (7.8%) were neutral, and very few selected “Agree” ($n = 5$, .5%) or “Strongly Agree” ($n = 2$, .2%). Most ($n = 301$, 30.3%) also agreed that *students with special needs should always be included in music classes*. When asked if *students with special needs were more expressive than “regular” students*, the majority ($n = 597$, 60.2%) were neutral, while 230 (23.2%) disagreed.

When asked to rate the statement, *Students with special needs do not fit in with other students*, most participants ($n = 524$, 52.8%) disagreed. Two hundred sixty-six (26.8%) selected “neutral,” and 165 (16.6%) selected “strongly disagree.” Most participants ($n = 541$, 54.5%) also disagreed with the statement, *Students with special needs do not participate well in music*, while 222 (22.4%) were “neutral,” and 198 (20%) “strongly disagreed.” On the inverse statement, *Students with special needs are not disruptive in music classes*, participants were overwhelmingly “neutral” ($n = 483$, 48.7%), while 249 (25.1%) “disagreed.”

When asked if *students with special needs were less expressive than regular students*, participants ($n = 455$, 45.9%) were also “neutral,” but almost as many ($n = 407$, 41%) “disagreed” with this statement. On the statement, *Students with special needs are not accepted by their peers*, over half ($n = 561$, 56.6%) “disagreed” while less than 1% ($n = 7$) “agreed.” On the final statement, *Students with special needs are not difficult to teach*, almost half ($n = 449$, 45.3%) were “neutral,” while the numbers of those who “agreed” ($n = 249$, 25.1%) and those who “disagreed” ($n = 237$, 23.9%) were almost equal. Table 34 shows the descriptive statistics, and Table 35 shows the full results for this question.

Table 34

Descriptive Statistics: Agreement Levels Special Needs Statements

<i>Item</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>	<i>Percentiles</i>		
						<i>25th</i>	<i>50th (Median)</i>	<i>75th</i>
participate well in music	992	3.86	.741	1	5	3.00	4.00	4.00
are accepted by their peers	992	3.71	.810	1	5	3.00	4.00	4.00
are disruptive in music classes	992	2.77	.849	1	5	2.00	3.00	3.00
always require modifications	992	2.68	.912	1	5	2.00	3.00	3.00

(continues)

<i>Item</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>	<i>Percentiles</i>		
						<i>25th</i>	<i>50th (Median)</i>	<i>75th</i>
<i>Students with special needs...</i>								
never require modifications	992	2.07	.760	1	5	2.00	2.00	3.00
are difficult to teach	992	2.57	.857	1	5	2.00	3.00	3.00
do not belong in music classes	992	1.44	.676	1	5	1.00	1.00	2.00
should always be in music class(es)	992	3.62	1.096	1	5	3.00	4.00	5.00
are more expressive than "regular" students	992	2.85	.733	1	5	2.00	3.00	3.00
do not fit in with other students	992	2.18	.750	1	5	2.00	2.00	3.00
do not participate well in music	992	2.09	.746	1	5	2.00	2.00	3.00
are not disruptive in music classes	992	2.97	.808	1	5	2.00	3.00	3.00
are less expressive than "regular" students	992	2.47	.715	1	4	2.00	3.00	3.00
are not accepted by their peers	992	2.29	.771	1	5	2.00	2.00	3.00
are not difficult to teach	992	3.03	.848	1	5	2.00	3.00	4.00

Table 35

Agreement Levels on Special Needs Students Characteristics

<i>Item, Students with special needs...</i>	<i>Rating</i>	<i>f</i>	<i>%</i>	<i>Valid %</i>	<i>Valid Cum %</i>
participate well in music	Strongly Disagree	5	.5	.5	.5
	Disagree	28	2.7	2.8	3.3
	Neutral	237	23.1	23.9	27.2
	Agree	552	53.7	55.6	82.9
	Strongly Agree	170	16.5	17.1	100.0
	Total	992	96.5	100.0	
	Missing	36	3.5		
are accepted by their peers	Strongly Disagree	9	.9	.9	.9
	Disagree	64	6.2	6.5	7.4
	Neutral	267	26.0	26.9	34.3
	Agree	521	50.7	52.5	86.8
	Strongly Agree	131	12.7	13.2	100.0
	Total	992	96.5	100.0	
	Missing	36	3.5		
are disruptive in music classes	Strongly Disagree	57	5.5	5.7	5.7
	Disagree	313	30.4	31.6	37.3
	Neutral	438	42.6	44.2	81.5
	Agree	170	16.5	17.1	98.6
	Strongly Agree	14	1.4	1.4	100.0
	Total	992	96.5	100.0	
	Missing	36	3.5		
Total	1028	100.0			

(continues)

<i>Item, Students with special needs...</i>	<i>Rating</i>	<i>f</i>	<i>%</i>	<i>Valid %</i>	<i>Valid Cum %</i>
always require modifications	Strongly Disagree	47	4.6	4.7	4.7
	Disagree	448	43.6	45.2	49.9
	Neutral	304	29.6	30.6	80.5
	Agree	161	15.7	16.2	96.8
	Strongly Agree	32	3.1	3.2	100.0
	Total	992	96.5	100.0	
	Missing	36	3.5		
	Total	1028	100.0		
never require modifications	Strongly Disagree	222	21.6	22.4	22.4
	Disagree	510	49.6	51.4	73.8
	Neutral	240	23.3	24.2	98.0
	Agree	13	1.3	1.3	99.3
	Strongly Agree	7	.7	.7	100.0
	Total	992	96.5	100.0	
	Missing	36	3.5		
	Total	1028	100.0		
are more expressive than "regular" students	Strongly Disagree	33	3.2	3.3	3.3
	Disagree	230	22.4	23.2	26.5
	Neutral	597	58.1	60.2	86.7
	Agree	112	10.9	11.3	98.0
	Strongly Agree	20	1.9	2.0	100.0
	Total	992	96.5	100.0	
	Missing	36	3.5		
	Total	1028	100.0		
do not fit in with other students	Strongly Disagree	165	16.1	16.6	16.6
	Disagree	524	51.0	52.8	69.5
	Neutral	266	25.9	26.8	96.3
	Agree	35	3.4	3.5	99.8
	Strongly Agree	2	.2	.2	100.0
	Total	992	96.5	100.0	
	Missing	36	3.5		
	Total	1028	100.0		
do not participate well in music	Strongly Disagree	198	19.3	20.0	20.0
	Disagree	541	52.6	54.5	74.5
	Neutral	222	21.6	22.4	96.9
	Agree	28	2.7	2.8	99.7
	Strongly Agree	3	.3	.3	100.0
	Total	992	96.5	100.0	
	Missing	36	3.5		
	Total	1028	100.0		
are not disruptive in music classes	Strongly Disagree	21	2.0	2.1	2.1
	Disagree	249	24.2	25.1	27.2
	Neutral	483	47.0	48.7	75.9
	Agree	214	20.8	21.6	97.5
	Strongly Agree	25	2.4	2.5	100.0
	Total	992	96.5	100.0	
	Missing	36	3.5		
	Total	1028	100.0		

(continues)

<i>Item, Students with special needs...</i>	<i>Rating</i>	<i>f</i>	<i>%</i>	<i>Valid %</i>	<i>Valid Cum %</i>
are less expressive than "regular" students	Strongly Disagree	84	8.2	8.5	8.5
	Disagree	407	39.6	41.0	49.5
	Neutral	455	44.3	45.9	95.4
	Agree	46	4.5	4.6	100.0
	Total	992	96.5	100.0	
	Missing	36	3.5		
are not accepted by their peers	Strongly Disagree	111	10.8	11.2	11.2
	Disagree	561	54.6	56.6	67.7
	Neutral	252	24.5	25.4	93.1
	Agree	61	5.9	6.1	99.3
	Strongly Agree	7	.7	.7	100.0
	Total	992	96.5	100.0	
are not difficult to teach	Strongly Disagree	24	2.3	2.4	2.4
	Disagree	237	23.1	23.9	26.3
	Neutral	449	43.7	45.3	71.6
	Agree	249	24.2	25.1	96.7
	Strongly Agree	33	3.2	3.3	100.0
	Total	992	96.5	100.0	
	Missing	36	3.5		
	Total	1028	100.0		

Section 3: Accommodations and Modifications

Participants were asked to identify accommodations and/or modifications they made for students they teach with specific conditions. Seventy-six respondents did not complete the final question. Table 36 shows the conditions and the accommodations and/or modifications the remaining 952 participants selected.

For each condition, there were eight choices of accommodations or modifications: (a) adaptive instruments, (b) extended writing time, (c) verbal vs. written answers, (d) sound canceling or amplification devices, (e) modified assignments or music parts, (f) preferred seating, (g) paraprofessional or instructional support, or (h) none. Each respondent could choose any or all of the different accommodations or modifications for each condition.

Participants were asked about *specific learning disability* and *speech/language impairments*. For *specific learning disabilities*, participants indicated that they most often used *preferred seating* ($n = 617, 64.8\%$) and *modified assignments and/or music parts* ($n = 543, 57\%$). The participants indicated they used *adaptive instruments* ($n = 171, 18\%$) and *sound canceling/amplification devices* ($n = 124, 13\%$) less often. For students with *speech/language impairments*, participants indicated they used *preferred seating* ($n = 299, 31.4\%$) and *modified assignments and/or music parts* ($n = 286, 30\%$) most often.

When asked what they used for *visual impairments* (*blindness, low vision, strabismus, nystagmus*), almost half ($n = 428, 45\%$) indicated they use *preferred seating*, while 330 (34.7%) said they use *modified assignments and/or music parts*. For *hearing impairments*, the largest number of participants ($n = 391, 41\%$) used preferred seating, while 291 (30.6%) indicated they used *sound canceling or amplification devices*. For *orthopedic impairments such as cerebral palsy, spina bifida, and amputations*, almost half ($n = 460, 48.3\%$) indicated they *did not use any accommodations or modifications*, but *preferred seating* was the most frequently selected ($n = 298, 31.3\%$), followed by *modified assignments and/or music parts* ($n = 248, 26.1\%$). For the category of *other health impairments*, over half ($n = 593, 62.3\%$) indicated they *did not use any accommodations or modifications*, but 206 (21.6%) indicated they used *modified assignments and/or music parts*, followed by *preferred seating* ($n = 196, 20.6\%$).

Respondents selected many different modifications for *Autism*. Over half used *preferred seating* ($n = 534, 56.1\%$), followed by *modified assignments and/or music parts* ($n = 471, 49.5\%$). In this category, more music educators ($n = 352, 37\%$) also reported using a *paraprofessional or other instructional support*. *Adaptive instruments* were the least used ($n = 137, 14.4\%$). For *students with multiple disabilities*, again, *preferred seating* and *modified*

assignments and/or music parts were the most used and were almost equal ($n = 343, 36\%$ and $n = 342, 35.9\%$, respectively).

In the category of *developmental delay*, participants ($n = 386, 40.5\%$) indicated they used *modified assignments and/or music parts*, followed by *preferred seating* ($n = 326, 34.2\%$). However, 405 (42.5%) indicated they *did not use accommodations and modifications* with *developmental delay*. With *traumatic brain injury*, well over half ($n = 706, 74.2\%$) indicated they *do not use any accommodations or modifications*, but of those reporting use, *modified assignments and/or music parts* ($n = 148, 15.5\%$) and *preferred seating* ($n = 145, 15.2\%$) were the most used. For students with *deaf-blindness*, over half ($n = 672, 70.6\%$) said they *do not use accommodations and modifications*, and the most frequently reported were *modified assignments and/or music parts* ($n = 173, 18.2\%$) and *preferred seating* ($n = 168, 17.6\%$).

Finally, for *emotional disturbance*, over half ($n = 510, 53.6\%$) use *preferred seating*, while 31% ($n = 295$) used *modified assignments and/or music parts*. More music educators ($n = 287, 30.1\%$) reported using *a paraprofessional or other instructional support*, while 33.6% ($n = 320$) reported *no accommodations or modifications*.

Table 36

Participant Selected Accommodations and/or Modifications

Condition	Accommodation/Modification	Selected	<i>f</i>	%	<i>Valid %</i>	<i>Cum %</i>
Specific Learning Disability	Adaptive Instruments	No	781	82	82	82
		Yes	171	18	18	100
		Total	952	100	100	
	Extended Writing Time	No	598	62.8	62.8	62.8
		Yes	354	37.2	37.2	100
		Total	952	100	100	
	Verbal vs. Written Answers	No	608	63.9	63.9	63.9
		Yes	344	36.1	36.1	100
		Total	952	100	100	
	Sound Canceling or Amplification Devices	No	828	87	87	87
		Yes	124	13	13	100
		Total	952	100	100	
	Modified Assignments and/or Music Parts	No	409	43	43	43
		Yes	543	57	57	100
		Total	952	100	100	
	Preferred Seating	No	335	35.2	35.2	35.2
		Yes	617	64.8	64.8	100
		Total	952	100	100	
	Paraprofessional/ Instructional Support	No	688	72.3	72.3	72.3
		Yes	264	27.7	27.7	100
		Total	952	100	100	
None	No	786	82.6	82.6	82.6	
	Yes	166	17.4	17.4	100	
	Total	952	100	100		
Speech or Language Impairments	Adaptive Instruments	No	901	94.6	94.6	94.6
		Yes	51	5.4	5.4	100
		Total	952	100	100	
	Extended Writing Time	No	816	85.7	85.7	85.7
		Yes	136	14.3	14.3	100
		Total	952	100	100	
	Verbal vs. Written Answers	No	745	78.3	78.3	78.3
		Yes	207	21.7	21.7	100
		Total	952	100	100	
	Sound Canceling or Amplification Devices	No	866	91	91	91
		Yes	86	9	9	100
		Total	952	100	100	
	Modified Assignments and/or Music Parts	No	666	70	70	70
		Yes	286	30	30	100
		Total	952	100	100	
	Preferred Seating	No	653	68.6	68.6	68.6
		Yes	299	31.4	31.4	100
		Total	952	100	100	

Note. Participants could select more than one answer.

(continues)

Condition	Accommodation/Modification	Selected	<i>f</i>	%	<i>Valid %</i>	<i>Cum %</i>
Speech or Language Impairments	Paraprofessional/ Instructional Support	No	799	83.9	83.9	83.9
		Yes	153	16.1	16.1	100
		Total	952	100	100	
	None	No	556	58.4	58.4	58.4
		Yes	396	41.6	41.6	100
		Total	952	100	100	
Visual Impairments (Blindness, Low Vision, Strabismus, Nystagmus)	Adaptive Instruments	No	831	87.3	87.3	87.3
		Yes	121	12.7	12.7	100
		Total	952	100	100	
	Extended Writing Time	No	878	92.2	92.2	92.2
		Yes	74	7.8	7.8	100
		Total	952	100	100	
	Verbal vs. Written Answers	No	761	79.9	79.9	79.9
		Yes	191	20.1	20.1	100
		Total	952	100	100	
	Sound Canceling or Amplification Devices	No	917	96.3	96.3	96.3
		Yes	35	3.7	3.7	100
		Total	952	100	100	
	Modified Assignments and/or Music Parts	No	622	65.3	65.3	65.3
		Yes	330	34.7	34.7	100
		Total	952	100	100	
	Preferred Seating	No	524	55	55	55
		Yes	428	45	45	100
		Total	952	100	100	
	Paraprofessional/ Instructional Support	No	786	82.6	82.6	82.6
		Yes	166	17.4	17.4	100
		Total	952	100	100	
None	No	580	60.9	60.9	60.9	
	Yes	372	39.1	39.1	100	
	Total	952	100	100		
Hearing Impairments (Conductive, Sensorineural)	Adaptive Instruments	No	867	91.1	91.1	91.1
		Yes	85	8.9	8.9	100
		Total	952	100	100	
	Extended Writing Time	No	901	94.6	94.6	94.6
		Yes	51	5.4	5.4	100
		Total	952	100	100	
	Verbal vs. Written Answers	No	865	90.9	90.9	90.9
		Yes	87	9.1	9.1	100
		Total	952	100	100	
	Sound Canceling or Amplification Devices	No	661	69.4	69.4	69.4
		Yes	291	30.6	30.6	100
		Total	952	100	100	
	Modified Assignments and/or Music Parts	No	738	77.5	77.5	77.5
		Yes	214	22.5	22.5	100
		Total	952	100	100	

Note. Participants could select more than one answer.

(continues)

Condition	Accommodation/Modification	Selected	<i>f</i>	%	<i>Valid %</i>	<i>Cum %</i>
Hearing Impairments (Conductive, Sensorineural)	Preferred Seating	No	561	58.9	58.9	58.9
		Yes	391	41.1	41.1	100
		Total	952	100	100	
	Paraprofessional/ Instructional Support	No	795	83.5	83.5	83.5
		Yes	157	16.5	16.5	100
		Total	952	100	100	
	None	No	559	58.7	58.7	58.7
		Yes	393	41.3	41.3	100
		Total	952	100	100	
Orthopedic Impairments (cerebral palsy, spina bifida, amputations)	Adaptive Instruments	No	717	75.3	75.3	75.3
		Yes	235	24.7	24.7	100
		Total	952	100	100	
	Extended Writing Time	No	881	92.5	92.5	92.5
		Yes	71	7.5	7.5	100
		Total	952	100	100	
	Verbal vs. Written Answers	No	853	89.6	89.6	89.6
		Yes	99	10.4	10.4	100
		Total	952	100	100	
	Sound Canceling or Amplification Devices	No	940	98.7	98.7	98.7
		Yes	12	1.3	1.3	100
		Total	952	100	100	
	Modified Assignments and/or Music Parts	No	704	73.9	73.9	73.9
		Yes	248	26.1	26.1	100
		Total	952	100	100	
	Preferred Seating	No	654	68.7	68.7	68.7
		Yes	298	31.3	31.3	100
		Total	952	100	100	
	Paraprofessional/Instructional Support	No	734	77.1	77.1	77.1
		Yes	218	22.9	22.9	100
		Total	952	100	100	
None	No	492	51.7	51.7	51.7	
	Yes	460	48.3	48.3	100	
	Total	952	100	100		
Other Health Impairments (asthma, cystic fibrosis, epilepsy)	Adaptive Instruments	No	875	91.9	91.9	91.9
		Yes	77	8.1	8.1	100
		Total	952	100	100	
	Extended Writing Time	No	894	93.9	93.9	93.9
		Yes	58	6.1	6.1	100
		Total	952	100	100	
	Verbal vs. Written Answers	No	897	94.2	94.2	94.2
		Yes	55	5.8	5.8	100
		Total	952	100	100	
	Sound Canceling or Amplification Devices	No	936	98.3	98.3	98.3
		Yes	16	1.7	1.7	100
		Total	952	100	100	
	Modified Assignments and/or Music Parts	No	746	78.4	78.4	78.4
		Yes	206	21.6	21.6	100
		Total	952	100	100	

Note. Participants could select more than one answer.

(continues)

Condition	Accommodation/Modification	Selected	<i>f</i>	%	<i>Valid %</i>	<i>Cum %</i>	
Other Health Impairments (asthma, cystic fibrosis, epilepsy)	Preferred Seating	No	756	79.4	79.4	79.4	
		Yes	196	20.6	20.6	100	
		Total	952	100	100		
	Paraprofessional/ Instructional Support	No	848	89.1	89.1	89.1	
		Yes	104	10.9	10.9	100	
		Total	952	100	100		
	None	No	359	37.7	37.7	37.7	
		Yes	593	62.3	62.3	100	
		Total	952	100	100		
Autism	Adaptive Instruments	No	815	85.6	85.6	85.6	
		Yes	137	14.4	14.4	100	
		Total	952	100	100		
	Extended Writing Time	No	705	74.1	74.1	74.1	
		Yes	247	25.9	25.9	100	
		Total	952	100	100		
	Verbal vs. Written Answers	No	691	72.6	72.6	72.6	
		Yes	261	27.4	27.4	100	
		Total	952	100	100		
	Sound Canceling or Amplification Devices	No	805	84.6	84.6	84.6	
		Yes	147	15.4	15.4	100	
		Total	952	100	100		
	Modified Assignments and/or Music Parts	No	481	50.5	50.5	50.5	
		Yes	471	49.5	49.5	100	
		Total	952	100	100		
	Preferred Seating	No	418	43.9	43.9	43.9	
		Yes	534	56.1	56.1	100	
		Total	952	100	100		
	Paraprofessional/ Instructional Support	No	600	63	63	63	
		Yes	352	37	37	100	
		Total	952	100	100		
	None	No	749	78.7	78.7	78.7	
		Yes	203	21.3	21.3	100	
		Total	952	100	100		
	Multiple Disabilities	Adaptive Instruments	No	771	81	81	81
			Yes	181	19	19	100
			Total	952	100	100	
Extended Writing Time		No	773	81.2	81.2	81.2	
		Yes	179	18.8	18.8	100	
		Total	952	100	100		
Verbal vs. Written Answers		No	749	78.7	78.7	78.7	
		Yes	203	21.3	21.3	100	
		Total	952	100	100		
Sound Canceling or Amplification Devices		No	849	89.2	89.2	89.2	
		Yes	103	10.8	10.8	100	
		Total	952	100	100		
Modified Assignments and/or Music Parts		No	610	64.1	64.1	64.1	
		Yes	342	35.9	35.9	100	
		Total	952	100	100		

Note. Participants could select more than one answer.

(continues)

Condition	Accommodation/Modification	Selected	<i>f</i>	%	<i>Valid %</i>	<i>Cum %</i>	
Multiple Disabilities	Preferred Seating	No	609	64	64	64	
		Yes	343	36	36	100	
		Total	952	100	100		
	Paraprofessional/ Instructional Support	No	699	73.4	73.4	73.4	
		Yes	253	26.6	26.6	100	
		Total	952	100	100		
	None	No	499	52.4	52.4	52.4	
		Yes	453	47.6	47.6	100	
		Total	952	100	100		
Developmental Delay	Adaptive Instruments	No	851	89.4	89.4	89.4	
		Yes	101	10.6	10.6	100	
		Total	952	100	100		
	Extended Writing Time	No	732	76.9	76.9	76.9	
		Yes	220	23.1	23.1	100	
		Total	952	100	100		
	Verbal vs. Written Answers	No	730	76.7	76.7	76.7	
		Yes	222	23.3	23.3	100	
		Total	952	100	100		
	Sound Canceling or Amplification Devices	No	919	96.5	96.5	96.5	
		Yes	33	3.5	3.5	100	
		Total	952	100	100		
	Modified Assignments and/or Music Parts	No	566	59.5	59.5	59.5	
		Yes	386	40.5	40.5	100	
		Total	952	100	100		
	Preferred Seating	No	626	65.8	65.8	65.8	
		Yes	326	34.2	34.2	100	
		Total	952	100	100		
	Paraprofessional/ Instructional Support	No	790	83	83	83	
		Yes	162	17	17	100	
		Total	952	100	100		
	None	No	547	57.5	57.5	57.5	
		Yes	405	42.5	42.5	100	
		Total	952	100	100		
	Traumatic Brain Injury	Adaptive Instruments	No	877	92.1	92.1	92.1
			Yes	75	7.9	7.9	100
			Total	952	100	100	
Extended Writing Time		No	860	90.3	90.3	90.3	
		Yes	92	9.7	9.7	100	
		Total	952	100	100		
Verbal vs. Written Answers		No	864	90.8	90.8	90.8	
		Yes	88	9.2	9.2	100	
		Total	952	100	100		
Sound Canceling or Amplification Devices		No	913	95.9	95.9	95.9	
		Yes	39	4.1	4.1	100	
		Total	952	100	100		
Modified Assignments and/or Music Parts		No	804	84.5	84.5	84.5	
		Yes	148	15.5	15.5	100	
		Total	952	100	100		

Note. Participants could select more than one answer.

(continues)

Condition	Accommodation/Modification	Selected	<i>f</i>	%	<i>Valid %</i>	<i>Cum %</i>	
Traumatic Brain Injury	Preferred Seating	No	807	84.8	84.8	84.8	
		Yes	145	15.2	15.2	100	
		Total	952	100	100		
	Paraprofessional/ Instructional Support	No	836	87.8	87.8	87.8	
		Yes	116	12.2	12.2	100	
		Total	952	100	100		
	None	No	246	25.8	25.8	25.8	
		Yes	706	74.2	74.2	100	
		Total	952	100	100		
Deaf-Blindness	Adaptive Instruments	No	863	90.7	90.7	90.7	
		Yes	89	9.3	9.3	100	
		Total	952	100	100		
	Extended Writing Time	No	909	95.5	95.5	95.5	
		Yes	43	4.5	4.5	100	
		Total	952	100	100		
	Verbal vs. Written Answers	No	870	91.4	91.4	91.4	
		Yes	82	8.6	8.6	100	
		Total	952	100	100		
	Sound Canceling or Amplification Devices	No	868	91.2	91.2	91.2	
		Yes	84	8.8	8.8	100	
		Total	952	100	100		
	Modified Assignments and/or Music Parts	No	779	81.8	81.8	81.8	
		Yes	173	18.2	18.2	100	
		Total	952	100	100		
	Preferred Seating	No	784	82.4	82.4	82.4	
		Yes	168	17.6	17.6	100	
		Total	952	100	100		
	Paraprofessional/ Instructional Support	No	823	86.4	86.4	86.4	
		Yes	129	13.6	13.6	100	
		Total	952	100	100		
	None	No	280	29.4	29.4	29.4	
		Yes	672	70.6	70.6	100	
		Total	952	100	100		
	Emotional Disturbance	Adaptive Instruments	No	899	94.4	94.4	94.4
			Yes	53	5.6	5.6	100
			Total	952	100	100	
Extended Writing Time		No	794	83.4	83.4	83.4	
		Yes	158	16.6	16.6	100	
		Total	952	100	100		
Verbal vs. Written Answers		No	783	82.2	82.2	82.2	
		Yes	169	17.8	17.8	100	
		Total	952	100	100		
Sound Canceling or Amplification Devices		No	886	93.1	93.1	93.1	
		Yes	66	6.9	6.9	100	
		Total	952	100	100		
Modified Assignments and/or Music Parts		No	657	69	69	69	
		Yes	295	31	31	100	
		Total	952	100	100		

Note. Participants could select more than one answer.

(continues)

<i>Condition</i>	<i>Accommodation/Modification</i>	<i>Selected</i>	<i>f</i>	<i>%</i>	<i>Valid %</i>	<i>Cum %</i>
Emotional Disturbance	Preferred Seating	No	442	46.4	46.4	46.4
		Yes	510	53.6	53.6	100
		Total	952	100	100	
	Paraprofessional/ Instructional Support	No	665	69.9	69.9	69.9
		Yes	287	30.1	30.1	100
		Total	952	100	100	
	None	No	632	66.4	66.4	66.4
		Yes	320	33.6	33.6	100
		Total	952	100	100	

Note. Participants could select more than one answer.

Group Comparisons

Research question 8 asked if any differences existed between participants' responses, based on demographic variables. Kruskal-Wallis and Mann-Whitney U Non-parametric tests yielded several significant results for rating questions. Post hoc Chi-Square tests were used to show more specific differences. Comparisons were computed by state, highest degree earned, grade level(s) taught, coursework information, professional development, personal development, whether participants taught at least one class with special needs students, and whether they taught at least one self-contained class. Throughout, one must be aware that the groups are not equal (see Table 1). As a result there is a chance of Type I error, and significant differences between overall and subgroups may not in fact exist. On the opposite end, there is also a chance of a Type II error, where differences between groups may in fact exist, but were not indicated in the statistical results.

Condition Familiarity Comparisons

As a reminder, Table 28 shows the descriptive statistics for condition familiarity. Comparisons were computed by state, highest degree earned, grade level(s) taught, coursework information, professional development, personal development, whether participants taught at least one class with special needs students, and whether they taught at least one self-contained class. Overall the results indicate that those who (a) taught in states other than Alabama,

(b) taught primarily elementary level, (c) had a masters degree (over a bachelors), (d) attended and/or did their own training, and (e) taught special needs students indicated they had more knowledge about specific conditions.

State. Kruskal-Wallis tests indicated four significant differences among participant ratings of their own knowledge of special needs conditions when compared by state. Those conditions were Autism, Multiple Disabilities, Developmental Delay, and Traumatic Brain Injury. It appears, overall, Alabama teachers indicated lower ratings than teachers in other states. Table 37, Table 38, and Table 39 show the full results for this question.

Table 37

Kruskal-Wallis Test Conditions Comparisons by State

<i>Condition</i>	<i>State</i>	<i>N</i>	<i>Mean Rank</i>
Autism	Alabama	192	443.16
	Florida	91	499.77
	Georgia	153	503.25
	North Carolina	287	529.02
	South Carolina	66	456.96
	Tennessee	74	501.58
	Virginia	144	561.50
	Total	1007	
Multiple Disabilities	Alabama	192	451.27
	Florida	91	507.75
	Georgia	153	496.38
	North Carolina	287	525.82
	South Carolina	66	467.42
	Tennessee	74	492.47
	Virginia	144	559.24
	Total	1007	
Developmental Delay	Alabama	192	433.96
	Florida	91	543.33
	Georgia	153	520.67
	North Carolina	287	505.60
	South Carolina	66	490.34
	Tennessee	74	570.26
	Virginia	144	523.85
	Total	1007	

(continues)

<i>Condition</i>	<i>State</i>	<i>N</i>	<i>Mean Rank</i>
Traumatic Brain Injury	Alabama	192	494.28
	Florida	91	485.64
	Georgia	153	452.85
	North Carolina	287	537.30
	South Carolina	66	466.97
	Tennessee	74	554.48
	Virginia	144	507.57
	Total	1007	

Table 38

Chi-Square, Conditions Comparisons by State

<i>Statistic</i>	<i>Chi-Square</i>	<i>df</i>	<i>Asymp. Sig.</i>
Autism	19.253	6	0.004
Multiple Disabilities	15.391	6	0.017
Developmental Delay	19.073	6	0.004
Traumatic Brain Injury	13.693	6	0.033

Table 39

Mann-Whitney U: Conditions Comparisons by State

<i>Condition</i>	<i>State</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig. (2-tailed)</i>
Autism	Alabama	192	163.77	31443.00	12915.00	31443.00	-1.99	0.05
	Georgia	153	184.59	28242.00				
	Total	345						
	Alabama	192	215.59	41392.50	22864.500	41392.500	-3.273	.001
	North Carolina	287	256.33	73567.50				
	Total	479						
	South Carolina	66	90.58	5978.50	3767.500	5978.500	-2.505	.012
	Virginia	144	112.34	16176.50				
	Total	210						
Multiple Disabilities	Alabama	192	218.10	41875.00	23347.000	41875.000	-2.939	.003
	North Carolina	287	254.65	73085.00				
	Total	479						
	South Carolina	66	92.54	6107.50	3896.500	6107.500	-2.157	.031
	Virginia	144	111.44	16047.50				
	Total	210						
	Alabama	192	153.33	29438.50	10910.500	29438.500	-3.411	.001
	Virginia	144	188.73	27177.50				
	Total	336						

(continues)

<i>Condition</i>	<i>State</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig. (2-tailed)</i>
Develop- mental Delay	Alabama	192	132.69	25477.00	6949.000	25477.000	-2.851	.004
	Florida	91	161.64	14709.00				
	Total	283						
	Alabama	192	159.96	30712.00	12184.000	30712.000	-2.798	.005
	Georgia	153	189.37	28973.00				
	Total	345						
	Alabama	192	218.43	41939.00	23411.000	41939.000	-2.881	.004
	North Carolina	287	254.43	73021.00				
	Total	479						
Develop- mental Delay	Alabama	192	124.02	23811.50	5283.500	23811.500	-3.322	.001
	Tennessee	74	158.10	11699.50				
	Total	266						
	Alabama	192	155.76	29906.50	11378.500	29906.500	-2.854	.004
	Virginia	144	185.48	26709.50				
	Total	336						
Traumatic Brain Injury	Georgia	153	196.33	30038.50	18257.500	30038.500	-3.056	.002
	North Carolina	287	233.39	66981.50				
	Total	440						
	Georgia	153	106.37	16274.00	4493.000	16274.000	-2.665	.008
	Tennessee	74	129.78	9604.00				
	Total	227						

Highest degree earned. Kruskal-Wallis and post hoc Chi-Square tests indicated a significant difference among participant ratings of their own knowledge of special needs conditions, specifically, traumatic brain injury, when compared with participants' highest degree earned ($\chi^2(5) = 12.396, p = 0.03$). Table 40 shows the mean ranks for each, and Table 41 shows post hoc Chi-Square. Mann Whitney U indicated (Table 42) indicated that Masters Degreed participants were more familiar with this than those who only had a Bachelors degree.

Table 40

Kruskal-Wallis Test Ranks, Highest Degree Earned and Condition

<i>Condition</i>	<i>Highest Degree</i>	<i>N</i>	<i>Mean Rank</i>
Traumatic Brain Injury	Bachelors	382	472.45
	Alt Masters	6	356.42
	Masters	511	526.83
	Ed.S.	46	557.57
	Ph.D./D.M.A.	59	481.05
	Less than a Bachelors	3	558.00
	Total	1007	

Table 41

Chi-Square, Highest Degree Earned and Condition

<i>Condition</i>	<i>Chi-Square</i>	<i>df</i>	<i>Asymp. Sig.</i>
Traumatic Brain Injury	12.396	5	0.03

Table 42

Mann-Whitney U, Highest Degree Earned and Condition

<i>Condition</i>	<i>Highest Degree Earned</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig. (2-tailed)</i>
Traumatic Brain Injury	Bachelors	382	419.16	160117.50	86964.50	160117.50	-2.932	.003
	Masters	511	467.82	239053.50				
	Total	893						

Grade levels taught. Kruskal-Wallis tests indicated seven significant differences among participant ratings of their own knowledge of special needs conditions when compared by grade level(s) taught. Post hoc Chi-Square showed the differences were for participants' familiarity with speech/language impairments ($\chi^2(9) = 19.104, p = 0.024$), hearing impairments ($\chi^2(9) = 17.833, p = 0.037$), orthopedic impairments ($\chi^2(9) = 31.027, p = 0.000$), Autism ($\chi^2(9) = 33.466, p = 0.000$), multiple disabilities ($\chi^2(9) = 34.017, p = 0.000$), developmental delay ($\chi^2(9) = 43.363, p = 0.000$), and emotional disturbance ($\chi^2(9) = 19.576, p = 0.021$). Table 43 shows the

mean ranks for each, and Table 44 shows the test statistics. Mann Whitney U indicated an overall trend that those who taught secondary level students (middle and high school) knew less about these specific conditions than those who taught elementary level students. Table 45 shows the full results.

Table 43

Kruskal-Wallis Ranks, Condition by Level(s) Taught

<i>Condition</i>	<i>Grade Levels</i>	<i>N</i>	<i>Mean Rank</i>
Speech or Language Impairments	Pre-K	1	934.00
	Elementary	284	527.27
	Middle School	256	492.16
	High School	195	506.20
	Collegiate	15	429.30
	Other	4	296.13
	Elementary Middle School	40	608.16
	Elementary High School	9	601.50
	Middle High School	133	475.46
	Elementary, Middle, High School	69	442.59
	Total	1006	
Hearing Impairments (Conductive, Sensorineural)	Pre-K	1	820.00
	Elementary	284	553.57
	Middle School	256	494.42
	High School	195	478.92
	Collegiate	15	485.97
	Other	4	388.88
	Elementary Middle School	40	532.21
	Elementary High School	9	565.61
	Middle High School	133	460.39
	Elementary, Middle, High School	69	464.80
	Total	1006	
Orthopedic Impairments (cerebral palsy, spina bifida, amputations)	Pre-K	1	969.00
	Elementary	284	561.64
	Middle School	256	472.10
	High School	195	468.77
	Collegiate	15	509.50
	Other	4	532.75
	Elementary Middle School	40	479.65
	Elementary High School	9	768.44
	Middle High School	133	499.07
	Elementary, Middle, High School	69	456.88
	Total	1006	

(continues)

<i>Condition</i>	<i>Grade Levels</i>	<i>N</i>	<i>Mean Rank</i>
Autism	Pre-K	1	870.50
	Elementary	284	557.44
	Middle School	256	493.50
	High School	195	508.51
	Collegiate	15	370.67
	Other	4	247.50
	Elementary Middle School	40	535.19
	Elementary High School	9	604.00
	Middle High School	133	454.55
	Elementary, Middle, High School	69	405.70
	Total	1006	
Multiple Disabilities	Pre-K	1	969.00
	Elementary	284	566.20
	Middle School	256	489.57
	High School	195	467.36
	Collegiate	15	386.17
	Other	4	346.25
	Elementary Middle School	40	559.70
	Elementary High School	9	651.11
	Middle High School	133	469.03
	Elementary, Middle, High School	69	441.72
	Total	1006	
Developmental Delay	Pre-K	1	952.50
	Elementary	284	585.01
	Middle School	256	480.89
	High School	195	462.50
	Collegiate	15	433.43
	Other	4	301.25
	Elementary Middle School	40	515.65
	Elementary High School	9	636.44
	Middle High School	133	445.76
	Elementary, Middle, High School	69	475.12
	Total	1006	
Emotional Disturbance	Pre-K	1	936.00
	Elementary	284	539.00
	Middle School	256	498.78
	High School	195	482.17
	Collegiate	15	466.03
	Other	4	484.63
	Elementary Middle School	40	525.93
	Elementary High School	9	619.94
	Middle High School	133	509.20
	Elementary, Middle, High School	69	398.95
	Total	1006	

(continues)

Table 44

Chi-Square, Condition by Level(s) Taught

<i>Condition</i>	<i>Chi-Square</i>	<i>df</i>	<i>Asymp. Sig.</i>
Speech or Language Impairments	19.104	9	.024
Hearing Impairments (Conductive, Sensorineural)	17.883	9	.037
Orthopedic Impairments (cerebral palsy, spina bifida, amputations)	31.027	9	.000
Autism	33.466	9	.000
Multiple Disabilities	34.017	9	.000
Developmental Delay	43.363	9	.000
Emotional Disturbance	19.576	9	.021

Table 45

Mann-Whitney U, Condition by Level(s) Taught

<i>Condition</i>	<i>Level(s) Taught</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig. (2-tailed)</i>
Speech or Language Impairments	Elem.	284	182.94	51954.50	8111.50	10526.50	-2.30	.02
	Elem., MS, HS	69	152.56	10526.50				
	Total	353						
	MS	256	143.96	36854.00				
	Elem. MS	40	177.55	7102.00				
	Total	296						
	HS	195	114.15	22258.50				
	Elem. MS	40	136.79	5471.50				
	Total	235						
	Elem. MS	40	104.65	4186.00				
MS HS	133	81.69	10865.00					
Total	173							
Elem. MS	40	66.18	2647.00	933.00	3348.00	-2.89	.00	
Elem., MS, HS	69	48.52	3348.00					
Total	109							
Hearing Impairments (Conductive, Sensorineural)	Elem.	284	285.81	81170.50	32003.50	64899.50	-2.47	.01
	MS	256	253.51	64899.50				
	Total	540						
	Elem.	284	254.43	72258.00				
	HS	195	218.98	42702.00				
	Total	479						
	Elem.	284	220.96	62752.00				
	MS HS	133	183.47	24401.00				
	Total	417						
	Elem.	284	183.27	52048.50				
Elem., MS, HS	69	151.20	10432.50					
Total	353							

(continues)

Condition	Level(s) Taught	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig. (2-tailed)</i>
Autism	Elem.	284	287.12	81542.00	31632.00	64528.00	-2.72	.01
	MS	256	252.06	64528.00				
	Total	540						
	Elem.	284	152.75	43380.50	1349.50	1469.50	-2.50	.01
	Collegiate	15	97.97	1469.50				
	Total	299						
	Elem.	284	222.61	63220.00	15022.00	23933.00	-3.51	.00
	MS HS	133	179.95	23933.00				
	Total	417						
	Elem.	284	187.61	53280.50	6785.50	9200.50	-4.13	.00
	Elem., MS, HS	69	133.34	9200.50				
	Total	353						
	MS	256	169.29	43338.50	7221.50	9636.50	-2.41	.02
	Elem., MS, HS	69	139.66	9636.50				
Total	325							
Multiple Disabilities	HS	195	139.03	27111.50	5453.50	7868.50	-2.41	.02
	Elem., MS, HS	69	114.04	7868.50				
	Total	264						
	Elem. MS	40	64.33	2573.00	1007.00	3422.00	-2.42	.02
	Elem., MS, HS	69	49.59	3422.00				
	Total	109						
	Elem.	284	290.14	82398.50	30775.50	63671.50	-3.19	.00
	MS	256	248.72	63671.50				
	Total	540						
	Elem.	284	259.10	73584.00	22266.00	41376.00	-3.77	.00
	HS	195	212.18	41376.00				
	Total	479						
	Elem.	284	221.93	63027.00	15215.00	24126.00	-3.32	.00
	MS HS	133	181.40	24126.00				
Total	417							
Elem.	284	185.71	52742.00	7324.00	9739.00	-3.38	.00	
Elem., MS, HS	69	141.14	9739.00					
Total	353							
Elem. MS	40	63.23	2529.00	1051.00	3466.00	-2.14	.03	
Elem., MS, HS	69	50.23	3466.00					
Total	109							
Developmental Delay	Elem.	284	296.64	84245.50	28928.50	61824.50	-4.23	.00
	MS	256	241.50	61824.50				
	Total	540						
	Elem.	284	263.83	74927.00	20923.00	40033.00	-4.69	.00
	HS	195	205.30	40033.00				
	Total	479						
	Elem.	284	227.45	64595.00	13647.00	22558.00	-4.71	.00
	MS HS	133	169.61	22558.00				
	Total	417						
	Elem.	284	185.00	52540.00	7526.00	9941.00	-3.10	.00
Elem., MS, HS	69	144.07	9941.00					
Total	353							

(continues)

Condition	Level(s) Taught	N	Mean Rank	Sum of Ranks	U	W	Z	Asymp. Sig. (2-tailed)												
Emotional Disturbance	Elem.	284	250.91	71259.50	24590.50	43700.50	-2.14	.03												
	HS	195	224.11	43700.50																
	Total	479																		
	Elem.	284	187.02	53114.00					6952.00	9367.00	-3.86	.00								
	Elem., MS, HS	69	135.75	9367.00																
	Total	353																		
	MS	256	169.42	43371.00									7189.00	9604.00	-2.43	.01				
	Elem., MS, HS	69	139.19	9604.00																
	Total	325																		
	Elem. MS	40	64.20	2568.00													1012.00	3427.00	-2.41	.02
	Elem., MS, HS	69	49.67	3427.00																
	Total	109																		
Elem. HS	9	54.83	493.50	172.50	2587.50	-2.25	.02													
Elem., MS, HS	69	37.50	2587.50																	
Total	78																			
MS HS	133	109.62	14579.50					3508.50	5923.50	-2.84	.00									
Elem., MS, HS	69	85.85	5923.50																	
Total	202																			

Coursework information. The Mann-Whitney U test indicated significant differences among participant ratings of their own knowledge of special needs conditions when compared by participants' participation in coursework. Table 46 shows frequencies and mean ranks, while table 47 shows that those who had coursework indicated they knew more than those who did not.

Table 46

Mann Whitney U Ranks, Had Coursework and Condition Familiarity

Condition	Had Coursework	N	Mean Rank	Sum of Ranks
Specific Learning Disability	Yes	651	543.57	353862.00
	No	356	431.65	153666.00
	Total	1007		
Speech or Language Impairments	Yes	651	539.42	351164.00
	No	356	439.22	156364.00
	Total	1007		
Visual Impairments (Blindness, Low Vision, Strabismus, Nystagmus)	Yes	651	532.02	346347.00
	No	356	452.76	161181.00
	Total	1007		
Hearing Impairments (Conductive, Sensorineural)	Yes	651	532.10	346400.00
	No	356	452.61	161128.00
	Total	1007		

(continues)

<i>Condition</i>	<i>Had Coursework</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>
Orthopedic Impairments (cerebral palsy, spina bifida, amputations)	Yes	651	526.74	342910.00
	No	356	462.41	164618.00
	Total	1007		
Other Health Impairments (asthma, cystic fibrosis, epilepsy)	Yes	651	535.88	348860.00
	No	356	445.70	158668.00
	Total	1007		
Autism	Yes	651	537.05	349622.50
	No	356	443.55	157905.50
	Total	1007		
Multiple Disabilities	Yes	651	536.09	348992.50
	No	356	445.32	158535.50
	Total	1007		
Developmental Delay	Yes	651	540.43	351822.00
	No	356	437.38	155706.00
	Total	1007		
Traumatic Brain Injury	Yes	651	529.14	344468.50
	No	356	458.03	163059.50
	Total	1007		
Deaf-Blindness	Yes	651	517.16	336673.50
	No	356	479.93	170854.50
	Total	1007		
Emotional Disturbance	Yes	651	535.27	348464.00
	No	356	446.81	159064.00
	Total	1007		

Table 47

Mann Whitney U Statistics, Had Coursework and Condition Familiarity

<i>Item</i>	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig. (2-tailed)</i>
Specific Learning Disability	90120.00	153666.00	-6.05	.000
Speech or Language Impairments	92818.00	156364.00	-5.38	.000
Visual Impairments (Blindness, Low Vision, Strabismus, Nystagmus)	97635.00	161181.00	-4.25	.000
Hearing Impairments (Conductive, Sensorineural)	97582.00	161128.00	-4.27	.000
Orthopedic Impairments (cerebral palsy, spina bifida, amputations)	101072.00	164618.00	-3.45	.001
Other Health Impairments (asthma, cystic fibrosis, epilepsy)	95122.00	158668.00	-4.84	.000
Autism	94359.50	157905.50	-5.06	.000
Multiple Disabilities	94989.50	158535.50	-4.89	.000
Developmental Delay	92160.00	155706.00	-5.54	.000
Traumatic Brain Injury	99513.50	163059.50	-3.90	.000
Deaf-Blindness	107308.50	170854.50	-2.04	.041
Emotional Disturbance	95518.00	159064.00	-4.75	.000

Coursework had music content. The Mann-Whitney U test indicated significant differences for participant ratings of their own knowledge of special needs conditions when compared by participation in coursework that had music specific content. Table 48 and Table 49 show that those who had music-specific content knew more than those who did not.

Table 48

Mann Whitney U Test Ranks, Coursework Had Music Content and Condition Familiarity

<i>Item</i>	<i>Coursework had Music Content</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>
Specific Learning Disability	Yes	311	358.00	111336.50
	No	340	296.73	100889.50
	Total	651		
Speech or Language Impairments	Yes	311	352.39	109594.00
	No	340	301.86	102632.00
	Total	651		
Visual Impairments (Blindness, Low Vision, Strabismus, Nystagmus)	Yes	311	356.23	110788.50
	No	340	298.35	101437.50
	Total	651		
Hearing Impairments (Conductive, Sensorineural)	Yes	311	361.06	112291.00
	No	340	293.93	99935.00
	Total	651		
Orthopedic Impairments (cerebral palsy, spina bifida, amputations)	Yes	311	354.62	110288.00
	No	340	299.82	101938.00
	Total	651		
Other Health Impairments (asthma, cystic fibrosis, epilepsy)	Yes	311	352.48	109622.00
	No	340	301.78	102604.00
	Total	651		
Autism	Yes	311	357.61	111215.50
	No	340	297.09	101010.50
	Total	651		
Multiple Disabilities	Yes	311	360.01	111962.00
	No	340	294.89	100264.00
	Total	651		
Developmental Delay	Yes	311	351.72	109385.50
	No	340	302.47	102840.50
	Total	651		
Traumatic Brain Injury	Yes	311	350.82	109104.50
	No	340	303.30	103121.50
	Total	651		
Deaf-Blindness	Yes	311	355.56	110578.00
	No	340	298.96	101648.00
	Total	651		
Emotional Disturbance	Yes	311	360.31	112056.00
	No	340	294.62	100170.00
	Total	651		

Table 49

Mann Whitney U Statistics, Coursework Had Music Content and Condition Familiarity

<i>Item (vs. Coursework Had Music Content)</i>	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig. (2-tailed)</i>
Specific Learning Disability	42919.50	100889.50	-4.33	.000
Speech or Language Impairments	44662.00	102632.00	-3.54	.000
Visual Impairments (Blindness, Low Vision, Strabismus, Nystagmus)	43467.50	101437.50	-4.03	.000
Hearing Impairments (Conductive, Sensorineural)	41965.00	99935.00	-4.69	.000
Orthopedic Impairments (cerebral palsy, spina bifida, amputations)	43968.00	101938.00	-3.82	.000
Other Health Impairments (asthma, cystic fibrosis, epilepsy)	44634.00	102604.00	-3.55	.000
Autism	43040.50	101010.50	-4.27	.000
Multiple Disabilities	42294.00	100264.00	-4.57	.000
Developmental Delay	44870.50	102840.50	-3.45	.001
Traumatic Brain Injury	45151.50	103121.50	-3.36	.001
Deaf-Blindness	43678.00	101648.00	-4.02	.000

Coursework had fieldwork. The Mann-Whitney U test indicated significant differences among participant ratings of their own knowledge of special needs conditions when compared by participants' participation in coursework that had fieldwork. Table 50 and Table 51 show that those who had field placements in their coursework knew more than those who did not have field placements.

Table 50

Mann Whitney U Test Ranks, Coursework Had Field Placements and Condition Familiarity

<i>Condition</i>	<i>Coursework Had Field Placements</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>
Specific Learning Disability	Yes	194	364.23	70660.50
	No	457	309.77	141565.50
	Total	651		
Speech or Language Impairments	Yes	194	364.53	70718.00
	No	457	309.65	141508.00
	Total	651		
Visual Impairments (Blindness, Low Vision, Strabismus, Nystagmus)	Yes	194	361.77	70183.00
	No	457	310.82	142043.00
	Total	651		
Hearing Impairments (Conductive, Sensorineural)	Yes	194	370.54	71885.00
	No	457	307.09	140341.00
	Total	651		
Orthopedic Impairments (cerebral palsy, spina bifida, amputations)	Yes	194	360.78	69991.00
	No	457	311.24	142235.00
	Total	651		
Other Health Impairments (asthma, cystic fibrosis, epilepsy)	Yes	194	363.95	70606.00
	No	457	309.89	141620.00
	Total	651		
Autism	Yes	194	357.53	69360.50
	No	457	312.62	142865.50
	Total	651		
Multiple Disabilities	Yes	194	376.78	73096.00
	No	457	304.44	139130.00
	Total	651		
Developmental Delay	Yes	194	367.91	71374.50
	No	457	308.21	140851.50
	Total	651		
Traumatic Brain Injury	Yes	194	365.77	70959.00
	No	457	309.12	141267.00
	Total	651		
Deaf-Blindness	Yes	194	353.04	68490.50
	No	457	314.52	143735.50
	Total	651		
Emotional Disturbance	Yes	194	362.73	70370.50
	No	457	310.41	141855.50
	Total	651		

Table 51

Mann Whitney U Test Statistics, Coursework Had Fieldwork and Condition Familiarity

<i>Condition vs. Coursework Had Fieldwork Placement</i>	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig. (2-tailed)</i>
Specific Learning Disability	36912.50	141565.50	-3.52	.000
Speech or Language Impairments	36855.00	141508.00	-3.52	.000
Visual Impairments (Blindness, Low Vision, Strabismus, Nystagmus)	37390.00	142043.00	-3.25	.001
Hearing Impairments (Conductive, Sensorineural)	35688.00	140341.00	-4.06	.000
Orthopedic Impairments (cerebral palsy, spina bifida, amputations)	37582.00	142235.00	-3.16	.002
Other Health Impairments (asthma, cystic fibrosis, epilepsy)	36967.00	141620.00	-3.47	.001
Autism	38212.50	142865.50	-2.90	.004
Multiple Disabilities	34477.00	139130.00	-4.65	.000
Developmental Delay	36198.50	140851.50	-3.83	.000
Traumatic Brain Injury	36614.00	141267.00	-3.67	.000
Deaf-Blindness	39082.50	143735.50	-2.50	.012
Emotional Disturbance	37202.50	141855.50	-3.35	.001

Attended professional development. The Mann-Whitney U test indicated significant differences among participant ratings of their own knowledge of special needs conditions when compared by participants' participation in professional development. Similar to previous comparisons about training, participants who attended professional development knew more than those who did not. Table 52 and Table 53 show the full results for this item.

Table 52

Mann-Whitney Test Ranks, Attended Professional Development and Condition Familiarity

<i>Condition</i>	<i>Attended Prof. Dev.</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>
Specific Learning Disability	Yes	656	553.72	363239.50
	No	351	411.08	144288.50
	Total	1007		
Speech or Language Impairments	Yes	656	553.59	363158.00
	No	351	411.31	144370.00
	Total	1007		
Visual Impairments (Blindness, Low Vision, Strabismus, Nystagmus)	Yes	656	536.65	352044.00
	No	351	442.97	155484.00
	Total	1007		
Hearing Impairments (Conductive, Sensorineural)	Yes	656	543.30	356408.00
	No	351	430.54	151120.00
	Total	1007		
Orthopedic Impairments (cerebral palsy, spina bifida, amputations)	Yes	656	539.74	354069.50
	No	351	437.20	153458.50
	Total	1007		
Other Health Impairments (asthma, cystic fibrosis, epilepsy)	Yes	656	541.95	355516.00
	No	351	433.08	152012.00
	Total	1007		
Autism	Yes	656	551.44	361742.50
	No	351	415.34	145785.50
	Total	1007		
Multiple Disabilities	Yes	656	552.71	362575.50
	No	351	412.97	144952.50
	Total	1007		
Developmental Delay	Yes	656	552.68	362560.50
	No	351	413.01	144967.50
	Total	1007		
Traumatic Brain Injury	Yes	656	538.17	353040.50
	No	351	440.14	154487.50
	Total	1007		
Deaf-Blindness	Yes	656	526.56	345424.00
	No	351	461.83	162104.00
	Total	1007		
Emotional Disturbance	Yes	656	553.06	362809.00
	No	351	412.30	144719.00
	Total	1007		

Table 53

Mann-Whitney Test Statistics, Attended Professional Development and Condition Familiarity

<i>Item vs. Attended Professional Development</i>	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig. (2-tailed)</i>
Specific Learning Disability	82512.50	144288.50	-7.69	.000
Speech or Language Impairments	82594.00	144370.00	-7.62	.000
Visual Impairments (Blindness, Low Vision, Strabismus, Nystagmus)	93708.00	155484.00	-5.00	.000
Hearing Impairments (Conductive, Sensorineural)	89344.00	151120.00	-6.03	.000
Orthopedic Impairments (cerebral palsy, spina bifida, amputations)	91682.50	153458.50	-5.48	.000
Other Health Impairments (asthma, cystic fibrosis, epilepsy)	90236.00	152012.00	-5.82	.000
Autism	84009.50	145785.50	-7.34	.000
Multiple Disabilities	83176.50	144952.50	-7.51	.000
Developmental Delay	83191.50	144967.50	-7.48	.000
Traumatic Brain Injury	92711.50	154487.50	-5.36	.000
Deaf-Blindness	100328.00	162104.00	-3.54	.000
Emotional Disturbance	82943.00	144719.00	-7.53	.000

Completed personal reading and research. The Mann-Whitney U test indicated significant differences among participant ratings of their own knowledge of special needs conditions when compared by participants' participation their own reading and research about students with special needs. Table 54 and Table 55 show that those who did their own reading knew more than those who did not.

Table 54

Mann-Whitney Test Ranks, Personal Development and Condition Familiarity

<i>Item</i>	<i>Did Personal Research</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>
Specific Learning Disability	Yes	687	546.48	375431.00
	No	320	412.80	132097.00
	Total	1007		
Speech or Language Impairments	Yes	687	549.36	377412.00
	No	320	406.61	130116.00
	Total	1007		
Visual Impairments (Blindness, Low Vision, Strabismus, Nystagmus)	Yes	687	542.00	372352.00
	No	320	422.43	135176.00
	Total	1007		
Hearing Impairments (Conductive, Sensorineural)	Yes	687	546.81	375661.50
	No	320	412.08	131866.50
	Total	1007		
Orthopedic Impairments (cerebral palsy, spina bifida, amputations)	Yes	687	541.53	372033.50
	No	320	423.42	135494.50
	Total	1007		
Other Health Impairments (asthma, cystic fibrosis, epilepsy)	Yes	687	548.43	376768.50
	No	320	408.62	130759.50
	Total	1007		
Autism	Yes	687	552.90	379841.50
	No	320	399.02	127686.50
	Total	1007		
Multiple Disabilities	Yes	687	559.39	384300.00
	No	320	385.09	123228.00
	Total	1007		
Developmental Delay	Yes	687	563.55	387159.50
	No	320	376.15	120368.50
	Total	1007		
Traumatic Brain Injury	Yes	687	538.40	369878.00
	No	320	430.16	137650.00
	Total	1007		
Deaf-Blindness	Yes	687	532.57	365873.00
	No	320	442.67	141655.00
	Total	1007		
Emotional Disturbance	Yes	687	549.08	377221.00
	No	320	407.21	130307.00
	Total	1007		

Table 55

Mann-Whitney Test Statistics, Personal Development and Condition Familiarity

<i>Item vs. Personal Research</i>	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig. (2-tailed)</i>
Visual Impairments (Blindness, Low Vision, Strabismus, Nystagmus)	83816.00	135176.00	-6.24	.000
Hearing Impairments (Conductive, Sensorineural)	80506.50	131866.50	-7.04	.000
Orthopedic Impairments (cerebral palsy, spina bifida, amputations)	84134.50	135494.50	-6.17	.000
Other Health Impairments (asthma, cystic fibrosis, epilepsy)	79399.50	130759.50	-7.31	.000
Autism	76326.50	127686.50	-8.11	.000
Multiple Disabilities	71868.00	123228.00	-9.15	.000
Developmental Delay	69008.50	120368.50	-9.81	.000
Traumatic Brain Injury	86290.00	137650.00	-5.78	.000
Deaf-Blindness	90295.00	141655.00	-4.81	.000
Emotional Disturbance	78947.00	130307.00	-7.41	.000

Completed personal development in music. The Mann-Whitney U test indicated significant differences among participant ratings of their own knowledge of special needs conditions when compared by participants' participation in their own reading and research about teaching music to students with special needs. Similar to the previous question, those who did their own research and reading about special needs students and music knew more than those who indicated they did not do their own research. Table 56 and Table 57 show the full results for this item.

Table 56

Mann-Whitney Test Ranks, Personal Development in Music and Condition Familiarity

<i>Condition</i>	<i>Did Personal Research in Music</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>
Specific Learning Disability	Yes	677	546.62	370064.50
	No	330	416.56	137463.50
	Total	1007		
Speech or Language Impairments	Yes	677	548.24	371159.00
	No	330	413.24	136369.00
	Total	1007		
Visual Impairments (Blindness, Low Vision, Strabismus, Nystagmus)	Yes	677	546.05	369672.50
	No	330	417.74	137855.50
	Total	1007		
Hearing Impairments (Conductive, Sensorineural)	Yes	677	545.85	369537.50
	No	330	418.15	137990.50
	Total	1007		
Orthopedic Impairments (cerebral palsy, spina bifida, amputations)	Yes	677	547.71	370800.00
	No	330	414.33	136728.00
	Total	1007		
Other Health Impairments (asthma, cystic fibrosis, epilepsy)	Yes	677	544.52	368639.50
	No	330	420.87	138888.50
	Total	1007		
Autism	Yes	677	547.76	370833.00
	No	330	414.23	136695.00
	Total	1007		
Multiple Disabilities	Yes	677	557.20	377221.50
	No	330	394.87	130306.50
	Total	1007		
Developmental Delay	Yes	677	560.05	379155.50
	No	330	389.01	128372.50
	Total	1007		
Traumatic Brain Injury	Yes	677	547.36	370564.00
	No	330	415.04	136964.00
	Total	1007		
Deaf-Blindness	Yes	677	535.16	362304.00
	No	330	440.07	145224.00
	Total	1007		
Emotional Disturbance	Yes	677	546.21	369787.00
	No	330	417.40	137741.00
	Total	1007		

Table 57

Mann-Whitney Test Statistics, Personal Development in Music and Condition Familiarity

<i>Condition vs. Personal Research in Music</i>	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig. (2-tailed)</i>
Specific Learning Disability	82848.50	137463.50	-6.91	.000
Speech or Language Impairments	81754.00	136369.00	-7.12	.000
Visual Impairments (Blindness, Low Vision, Strabismus, Nystagmus)	83240.50	137855.50	-6.75	.000
Hearing Impairments (Conductive, Sensorineural)	83375.50	137990.50	-6.73	.000
Orthopedic Impairments (cerebral palsy, spina bifida, amputations)	82113.00	136728.00	-7.03	.000
Other Health Impairments (asthma, cystic fibrosis, epilepsy)	84273.50	138888.50	-6.52	.000
Autism	82080.00	136695.00	-7.09	.000
Multiple Disabilities	75691.50	130306.50	-8.59	.000
Developmental Delay	73757.50	128372.50	-9.03	.000
Traumatic Brain Injury	82349.00	136964.00	-7.12	.000
Deaf-Blindness	90609.00	145224.00	-5.13	.000
Emotional Disturbance	83126.00	137741.00	-6.78	.000

Class taught with special needs. Data were recoded to indicate whether they did or did not teach a class with special needs students each day. The Mann-Whitney U test indicated significant differences among participant ratings of their own knowledge of special needs conditions when compared by whether they taught a class with students with special needs, in all of the special needs conditions except for Deaf-Blindness. Table 58 and Table 59 show that those who teach special needs students indicated they knew more than those who did not.

Table 58

Mann Whitney U Ranks, Taught a Class with Special Needs and Condition Familiarity

<i>Condition</i>	<i>Taught Special Needs Students</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>
Specific Learning Disability	Yes	900	516.52	464867.50
	No	107	398.70	42660.50
	Total	1007		
Speech or Language Impairments	Yes	900	520.86	468775.00
	No	107	362.18	38753.00
	Total	1007		
Visual Impairments (Blindness, Low Vision, Strabismus, Nystagmus)	Yes	900	511.81	460626.50
	No	107	438.33	46901.50
	Total	1007		
Hearing Impairments (Conductive, Sensorineural)	Yes	900	515.89	464299.00
	No	107	404.01	43229.00
	Total	1007		
Orthopedic Impairments (cerebral palsy, spina bifida, amputations)	Yes	900	515.09	463582.00
	No	107	410.71	43946.00
	Total	1007		
Other Health Impairments (asthma, cystic fibrosis, epilepsy)	Yes	900	517.58	465823.00
	No	107	389.77	41705.00
	Total	1007		
Autism	Yes	900	523.75	471378.00
	No	107	337.85	36150.00
	Total	1007		
Multiple Disabilities	Yes	900	521.99	469790.00
	No	107	352.69	37738.00
	Total	1007		
Developmental Delay	Yes	900	523.95	471554.50
	No	107	336.20	35973.50
	Total	1007		
Traumatic Brain Injury	Yes	900	512.78	461497.50
	No	107	430.19	46030.50
	Total	1007		
Deaf-Blindness	Yes	900	509.46	458514.00
	No	107	458.07	49014.00
	Total	1007		
Emotional Disturbance	Yes	900	519.91	467923.00
	No	107	370.14	39605.00
	Total	1007		

Table 59

Mann Whitney U Statistics, Taught a Class with Special Needs and Condition Familiarity

<i>Condition vs. Taught a Class</i>	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig (2-tailed)</i>
Specific Learning Disability	36882.50	42660.50	-4.11	.000
Speech or Language Impairments	32975.00	38753.00	-5.50	.000
Visual Impairments (Blindness, Low Vision, Strabismus, Nystagmus)	41123.50	46901.50	-2.54	.011
Hearing Impairments (Conductive, Sensorineural)	37451.00	43229.00	-3.87	.000
Orthopedic Impairments (cerebral palsy, spina bifida, amputations)	38168.00	43946.00	-3.61	.000
Other Health Impairments (asthma, cystic fibrosis, epilepsy)	35927.00	41705.00	-4.42	.000
Autism	30372.00	36150.00	-6.48	.000
Multiple Disabilities	31960.00	37738.00	-5.88	.000
Developmental Delay	30195.50	35973.50	-6.50	.000
Traumatic Brain Injury	40252.50	46030.50	-2.92	.004
Deaf-Blindness	43236.00	49014.00	-1.82	.069
Emotional Disturbance	33827.00	39605.00	-5.18	.000

Self-contained class taught. The Mann-Whitney U test indicated significant differences among participant ratings of their own knowledge of special needs conditions when compared by whether the participants taught a self-contained class. As before, with teachers who indicated they taught special needs students, those who indicated they taught a self-contained music class also indicated they knew more than those who did not. Table 60 and Table 61 show the full results for this item.

Table 60

Mann-Whitney U Ranks, Taught Self-Contained Class and Condition Familiarity

<i>Condition</i>	<i>Taught Self-Contained Class</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>
Specific Learning Disability	Yes	128	525.73	67293.00
	No	879	500.84	440235.00
	Total	1007		
Speech or Language Impairments	Yes	128	541.09	69259.00
	No	879	498.60	438269.00
	Total	1007		
Visual Impairments (Blindness, Low Vision, Strabismus, Nystagmus)	Yes	128	515.33	65962.50
	No	879	502.35	441565.50
	Total	1007		
Hearing Impairments (Conductive, Sensorineural)	Yes	128	531.69	68056.50
	No	879	499.97	439471.50
	Total	1007		
Orthopedic Impairments (cerebral palsy, spina bifida, amputations)	Yes	128	567.93	72695.00
	No	879	494.69	434833.00
	Total	1007		
Other Health Impairments (asthma, cystic fibrosis, epilepsy)	Yes	128	494.34	63276.00
	No	879	505.41	444252.00
	Total	1007		
Autism	Yes	128	562.59	72011.00
	No	879	495.47	435517.00
	Total	1007		
Multiple Disabilities	Yes	128	606.44	77624.50
	No	879	489.08	429903.50
	Total	1007		
Developmental Delay	Yes	128	579.18	74134.50
	No	879	493.05	433393.50
	Total	1007		
Traumatic Brain Injury	Yes	128	583.87	74735.00
	No	879	492.37	432793.00
	Total	1007		
Deaf-Blindness	Yes	128	563.51	72129.00
	No	879	495.33	435399.00
	Total	1007		
Emotional Disturbance	Yes	128	531.28	68003.50
	No	879	500.03	439524.50
	Total	1007		

Table 61

Mann-Whitney U Statistics, Taught Self-Contained Class and Condition Familiarity

<i>Condition vs Taught Self-Contained Class</i>	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig. (2-tailed)</i>
Specific Learning Disability	53475.00	440235.00	-0.94	.348
Speech or Language Impairments	51509.00	438269.00	-1.59	.112
Visual Impairments (Blindness, Low Vision, Strabismus, Nystagmus)	54805.50	441565.50	-0.48	.628
Hearing Impairments (Conductive, Sensorineural)	52711.50	439471.50	-1.19	.236
Orthopedic Impairments (cerebral palsy, spina bifida, amputations)	48073.00	434833.00	-2.74	.006
Other Health Impairments (asthma, cystic fibrosis, epilepsy)	55020.00	63276.00	-0.41	.679
Autism	48757.00	435517.00	-2.53	.011
Multiple Disabilities	43143.50	429903.50	-4.41	.000
Developmental Delay	46633.50	433393.50	-3.22	.001
Traumatic Brain Injury	46033.00	432793.00	-3.50	.000
Deaf-Blindness	48639.00	435399.00	-2.61	.009
Emotional Disturbance	52764.50	439524.50	-1.17	.243

Legal Principles Knowledge Comparisons

As a reminder, Table 30 shows the descriptive statistics for legal item familiarity. Comparisons were computed by state, highest degree earned, grade level(s) taught, coursework information, professional development, personal development, whether participants taught at least one class with special needs students, and whether they taught at least one self-contained class.

State. Kruskal-Wallis and post hoc Chi-Square tests indicated two significant differences among participant ratings of their own knowledge of legal knowledge when compared by state. Those principles were least restrictive environment principle and procedural due process principle. Table 62, Table 63, and Table 64 show the differences between specific states.

Table 62

Kruskal-Wallis Test Ranks, State and Legal Principles

<i>Principle</i>	<i>State</i>	<i>N</i>	<i>Mean Rank</i>
Least Restrictive Environment Principle	Alabama	191	487.53
	Florida	90	516.46
	Georgia	153	546.53
	North Carolina	286	484.71
	South Carolina	65	409.66
	Tennessee	74	542.01
	Virginia	144	520.32
	Total	1003	
Procedural Due Process Principle	Alabama	191	533.73
	Florida	90	536.08
	Georgia	153	489.44
	North Carolina	286	473.73
	South Carolina	65	470.78
	Tennessee	74	580.99
	Virginia	144	481.60
	Total	1003	

Table 63

Chi-Square, State and Legal Principles

<i>Principle</i>	<i>Chi-Square</i>	<i>df</i>	<i>Asymp. Sig.</i>
Least Restrictive Environment Principle	14.620	6	.023
Procedural Due Process Principle	15.049	6	.020

Table 64

Mann Whitney U Test Statistics, State and Legal Principles

State		N	Mean Rank	Sum of Ranks	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig. (2-tailed)</i>
Least Restrictive Environment Principle	Florida	90	84.33	7589.50	2355.50	4500.50	-2.13	.034
	South Carolina	65	69.24	4500.50				
	Total	155						
	Florida	90	84.33	7589.50	2355.50	4500.50	-2.13	.034
	South Carolina	65	69.24	4500.50				
	Total	155						
	Georgia	153	237.63	36358.00	19181.00	60222.00	-2.18	.029
	North Carolina	286	210.57	60222.00				
	Total	439						
	Georgia	153	118.45	18123.00	3603.00	5748.00	-3.29	.001
	South Carolina	65	88.43	5748.00				
	Total	218						
	South Carolina	65	59.89	3893.00	1748.00	3893.00	-2.84	.004
	Tennessee	74	78.88	5837.00				
	Total	139						
South Carolina	65	89.25	5801.50	3656.50	5801.50	-2.60	.009	
Virginia	144	112.11	16143.50					
Total	209							
Procedural Due Process Principle	Alabama	191	256.62	49014.00	23948.00	64989.00	-2.41	.016
	North Carolina	286	227.23	64989.00				
	Total	477						
	South Carolina	65	61.69	4010.00	1865.00	4010.00	-2.37	.018
	Tennessee	74	77.30	5720.00				
	Total	139						
	Tennessee	74	123.50	9139.00	4292.00	14732.00	-2.47	.014
	Virginia	144	102.31	14732.00				
	Total	218						
	Georgia	153	107.31	16418.50	4637.50	16418.50	-2.31	.021
Tennessee	74	127.83	9459.50					
Total	227							
North Carolina	286	172.50	49336.00	8295.00	49336.00	-3.03	.002	
Tennessee	74	211.41	15644.00					
Total	360							

Highest degree earned. Kruskal-Wallis tests indicated two significant differences among participant ratings of their own legal knowledge when compared by highest degree earned. A post hoc Chi-Square showed those principles were least restrictive environment and procedural due process. Table 65, Table 66, and Table 67 show that the specific difference existed between those who had a Masters over a Bachelors, and that ultimately those who had a Masters degree indicated they knew more about these principles.

Table 65

Kruskal-Wallis Test Ranks, Highest Degree and Legal Principles

Highest Degree		N	Mean Rank
Least Restrictive Environment Principle	Bachelors	380	462.36
	Alt Masters	6	478.50
	Masters	509	525.63
	Ed.S.	46	550.87
	Ph.D./D.M.A.	59	530.83
	Less than a Bachelors	3	245.17
Total		1003	
Procedural Due Process Principle	Bachelors	380	458.20
	Alt Masters	6	420.83
	Masters	509	521.06
	Ed.S.	46	559.88
	Ph.D./D.M.A.	59	584.31
	Less than a Bachelors	3	471.83
Total		1003	

Table 66

Chi-Square, Highest Degree and Legal Principles

Item	Chi-Square	df	Asymp. Sig.
Least Restrictive Environment Principle	15.532	5	.008
Procedural Due Process Principle	20.033	5	.001

Table 67

Mann Whitney U Test Ranks, Highest Degree Earned and Legal Principles

<i>Principle</i>	<i>Highest Degree</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>
Least Restrictive Environment Principle	Bachelors	380	412.81	156867
	Masters	509	469.03	238738
	Total	889		
	Bachelors	380	209.45	79590
	Ed.S.	46	246.98	11361
Procedural Due Process Principle	Total	426		
	Bachelors	380	413.06	156964.5
	Masters	509	468.84	238640.5
	Total	889		
	Bachelors	380	208.7	79307
	Ed.S.	46	253.13	11644
	Total	426		
Procedural Due Process Principle	Bachelors	380	212.72	80834
	Ph.D./D.M.A.	59	266.88	15746
	Total	439		

Table 68

Mann Whitney U Test Statistics, Highest Degree Earned and Legal Principles

<i>Principle</i>	<i>Highest Degree</i>	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig. (2-tailed)</i>
Least Restrictive Environment Principle	Bachelors	84477	156867	-3.31	0.001
	Masters				
	Total				
	Bachelors	7200	79590	-2	0.045
Procedural Due Process Principle	Ed.S.				
	Total				
	Bachelors	84574.5	156964.5	-3.39	0.001
	Masters				
	Total				
Procedural Due Process Principle	Bachelors	6917	79307	-2.47	0.013
	Ed.S.				
	Total				
	Bachelors	8444	80834	-3.26	0.001
Procedural Due Process Principle	Ph.D./D.M.A.				
	Total				

Grade levels taught. Kruskal-Wallis tests indicated two significant differences among participant ratings of their own legal knowledge when compared by grade level(s) taught. Those principles were least restrictive environment, procedural due process. Table 69 shows the frequencies and mean ranks for each, and Table 70 shows post hoc Chi-Square. Table 71 and Table 72 show that for least restrictive environment, elementary knew more than those who taught middle and/or high school. For procedural due process, collegiate knew more than those who did not.

Table 69

Kruskal-Wallis Test Ranks, Grades Level(s) Taught and Legal Principles

<i>Principle</i>	<i>Grade Level(s) Taught</i>	<i>N</i>	<i>Mean Rank</i>
Least Restrictive Environment Principle	PreK	1	651.50
	Elementary	283	541.51
	Middle School	254	498.66
	High School	194	483.26
	Collegiate	15	539.23
	Other	4	633.00
	Elementary and Middle School	40	556.79
	Elementary and High School	9	524.50
	Middle and High School	133	467.05
	Elementary, Middle, and High School	69	412.53
	Total	1002	
Procedural Due Process Principle	PreK	1	225.00
	Elementary	283	498.43
	Middle School	254	493.82
	High School	194	519.70
	Collegiate	15	693.73
	Other	4	668.38
	Elementary and Middle School	40	495.98
	Elementary and High School	9	536.22
	Middle and High School	133	514.35
	Elementary, Middle, and High School	69	417.64
	Total	1002	

Table 70

Chi-Square, Grades Level(s) Taught and Legal Principles

<i>Principle</i>	<i>Chi-Square</i>	<i>df</i>	<i>Asymp. Sig.</i>
Least Restrictive Environment Principle	18.349	9	.031
Procedural Due Process Principle	17.850	9	.037

Table 71

Mann Whitney U Test Ranks, Grades Level(s) Taught and Legal Principles

<i>Principle</i>	<i>Level(s) Taught</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>
Least Restrictive Environment Principle	Elem	283	250.14	70791
	HS	194	222.74	43212
	Total	477		
Principle	Elem	283	218.41	61810.5
	MS HS	133	187.41	24925.5
	Total	416		
	Elem	283	185.58	52519.5
	Elem MS HS	69	139.25	9608.5
	Total	352		
	MS	254	168.04	42683
	Elem MS HS	69	139.75	9643
	Total	323		
	Elem MS	40	64.65	2586
Elem MS HS	69	49.41	3409	
Total	109			
Procedural Due Process Principle	Elem	283	146.52	41464.5
	Collegiate	15	205.77	3086.5
	Total	298		
	Elem	283	182.29	51589
	Elem MS HS	69	152.74	10539
	Total	352		
	MS	254	132	33528
	Collegiate	15	185.8	2787
	Total	269		
	MS	254	167.24	42479
	Elem MS HS	69	142.71	9847
	Total	323		
	HS	194	102.48	19880.5
	Collegiate	15	137.63	2064.5
	Total	209		
	HS	194	138.71	26909.5
	Elem MS HS	69	113.14	7806.5
	Total	263		
	Collegiate	15	35.97	539.5
	Elem MS	40	25.01	1000.5
Total	55			
Collegiate	15	99	1485	
MS HS	133	71.74	9541	
Total	148			
Collegiate	15	60.47	907	
Elem MS HS	69	38.59	2663	
Total	84			
MS HS	133	108.27	14399.5	
Elem MS HS	69	88.46	6103.5	
Total	202			

Table 72

Mann Whitney U Test Statistics, Grades Level(s) Taught and Legal Principles

<i>Principle</i>	<i>Level(s) Taught</i>	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig. (2-tailed)</i>
Least Restrictive Environment Principle	Elem	24297	43212	-2.19	0.029
	HS				
	Total				
	Elem	16014.5	24925.5	-2.51	0.012
	MS HS				
	Total				
	Elem	7193.5	9608.5	-3.47	0.001
	Elem MS HS				
	Total				
	MS	7228	9643	-2.29	0.022
	Elem MS HS				
	Total				
Procedural Due Process Principle	Elem	1278.5	41464.5	-2.72	0.007
	Collegiate				
	Total				
	Elem	8124	10539	-2.29	0.022
	Elem MS HS				
	Total				
	MS	1143	33528	-2.75	0.006
	Collegiate				
	Total				
	MS	7432	9847	-2.07	0.038
	Elem MS HS				
	Total				
	HS	965.5	19880.5	-2.27	0.023
	Collegiate				
	Total				
	HS	5391.5	7806.5	-2.55	0.011
	Elem MS HS				
	Total				
	Collegiate	180.5	1000.5	-2.35	0.019
	Elem MS				
	Total				
Collegiate	630	9541	-2.43	0.015	
MS HS					
Total					
Collegiate	248	2663	-3.4	0.001	
Elem MS HS					
Total					
MS HS	3688.5	6103.5	-2.43	0.015	
Elem MS HS					
Total					

Coursework information. The Mann-Whitney U test indicated significant differences among participant ratings of their own legal knowledge when compared by participants' participation in coursework. Table 73 and 74 show that those who had coursework indicated they knew more than those who did not have coursework.

Table 73

Mann Whitney U Test Ranks, Coursework Taken and Legal Principles

<i>Principle</i>	<i>Had Coursework</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>
IDEA	Yes	648	539.22	349415.00
	No	355	434.06	154091.00
	Total	1003		
Zero Reject Principle	Yes	648	514.48	333383.00
	No	355	479.22	170123.00
	Total	1003		
Nondiscriminatory Evaluation Principle	Yes	648	529.25	342957.00
	No	355	452.25	160549.00
	Total	1003		
Appropriate Education Principle	Yes	648	540.52	350257.00
	No	355	431.69	153249.00
	Total	1003		
Least Restrictive Environment Principle	Yes	648	559.67	362663.50
	No	355	396.74	140842.50
	Total	1003		
Procedural Due Process Principle	Yes	648	539.32	349480.00
	No	355	433.88	154026.00
	Total	1003		
Parent And Student Participation Principle	Yes	648	530.97	344067.00
	No	355	449.12	159439.00
	Total	1003		
Definition Of An Individualized Education Program	Yes	648	544.08	352565.00
	No	355	425.19	150941.00
	Total	1003		
Individualized Education Program Process	Yes	648	542.33	351427.50
	No	355	428.39	152078.50
	Total	1003		

Table 74

Mann Whitney U Test Statistics, Coursework Taken and Legal Principles

<i>Principle vs. Had Coursework</i>	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig. (2-tailed)</i>
Level of Familiarity-IDEA	90901.00	154091.00	-6.04	.000
Level of Familiarity-Zero Reject Principle	106933.00	170123.00	-2.46	.014
Level of Familiarity-Nondiscriminatory Evaluation Principle	97359.00	160549.00	-4.53	.000
Level of Familiarity-Appropriate Education Principle	90059.00	153249.00	-6.16	.000
Level of Familiarity-Least Restrictive Environment Principle	77652.50	140842.50	-8.73	.000
Level of Familiarity-Procedural Due Process Principle	90836.00	154026.00	-5.82	.000
Level of Familiarity-Parent And Student Participation Principle	96249.00	159439.00	-4.51	.000
Level of Familiarity-Definition Of An Individualized Education Program	87751.00	150941.00	-6.48	.000
Level of Familiarity-Individualized Education Program Process	88888.50	152078.50	-6.17	.000

Coursework had music content. The Mann-Whitney U test indicated significant differences among participant ratings of their own legal knowledge when compared by participants' participation in coursework that had music specific content. Table 75 and Table 76 show that those who had coursework with music-specific content knew more than those who did not.

Table 75

Mann Whitney U Test Ranks, Coursework Had Music Content and Legal Principles

<i>Principle</i>	<i>Coursework Had Music Content</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>
IDEA	Yes	308	343.86	105910.00
	No	340	306.96	104366.00
	Total	648		
Zero Reject Principle	Yes	308	350.79	108043.00
	No	340	300.69	102233.00
	Total	648		
Nondiscriminatory Evaluation Principle	Yes	308	348.18	107240.50
	No	340	303.05	103035.50
	Total	648		
Appropriate Education Principle	Yes	308	348.58	107363.00
	No	340	302.69	102913.00
	Total	648		
Least Restrictive Environment Principle	Yes	308	344.50	106107.00
	No	340	306.38	104169.00
	Total	648		
Procedural Due Process Principle	Yes	308	349.32	107590.50
	No	340	302.02	102685.50
	Total	648		
Parent And Student Participation Principle	Yes	308	356.06	109665.00
	No	340	295.91	100611.00
	Total	648		
Definition Of An Individualized Education Program	Yes	308	348.52	107345.00
	No	340	302.74	102931.00
	Total	648		
Individualized Education Program Process	Yes	308	351.87	108374.50
	No	340	299.71	101901.50
	Total	648		

Table 76

Mann Whitney U Test Statistics, Coursework Had Music Content and Legal Principles

<i>Principle vs. Coursework Had Music Content</i>	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig. (2-tailed)</i>
IDEA	46396.00	104366.00	-2.67	.008
Zero Reject Principle	44263.00	102233.00	-4.38	.000
Nondiscriminatory Evaluation Principle	45065.50	103035.50	-3.34	.001
Appropriate Education Principle	44943.00	102913.00	-3.29	.001
Least Restrictive Environment Principle	46199.00	104169.00	-2.66	.008
Procedural Due Process Principle	44715.50	102685.50	-3.34	.001
Parent And Student Participation Principle	42641.00	100611.00	-4.25	.000
Definition of An Individualized Education Program	44961.00	102931.00	-3.29	.001
Individualized Education Program Process	43931.50	101901.50	-3.71	.000

Coursework had fieldwork. The Mann-Whitney U test indicated significant differences among participant ratings of their own legal knowledge when compared by participants' participation in coursework that had fieldwork. Table 77 and Table 78 show that those who had fieldwork indicated they knew more than those who did not.

Table 77

Mann Whitney U Test Ranks, Coursework Had Fieldwork Placements and Legal Principles

<i>Principle</i>	<i>Courses Had Field Placements</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>
IDEA	Yes	194	359.38	69719.50
	No	454	309.60	140556.50
	Total	648		
Zero Reject Principle	Yes	194	367.76	71344.50
	No	454	306.02	138931.50
	Total	648		
Nondiscriminatory Evaluation Principle	Yes	194	370.83	71940.50
	No	454	304.70	138335.50
	Total	648		

(continues)

<i>Principle</i>	<i>Courses Had Field Placements</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>
Appropriate Education Principle	Yes	194	366.52	71104.50
	No	454	306.55	139171.50
	Total	648		
Least Restrictive Environment Principle	Yes	194	348.05	67521.50
	No	454	314.44	142754.50
	Total	648		
Procedural Due Process Principle	Yes	194	369.10	71605.00
	No	454	305.44	138671.00
	Total	648		
Parent And Student Participation Principle	Yes	194	363.74	70565.00
	No	454	307.73	139711.00
	Total	648		
Definition Of An Individualized Education Program	Yes	194	356.51	69163.00
	No	454	310.82	141113.00
	Total	648		
Individualized Education Program Process	Yes	194	348.79	67666.00
	No	454	314.12	142610.00
	Total	648		

Table 78

Mann Whitney U Test Statistics, Coursework Had Fieldwork Placements and Legal Principles

<i>Item vs. Coursework Had Music Content</i>	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig. (2-tailed)</i>
IDEA	37271.50	140556.50	-3.30	.001
Zero Reject Principle	35646.50	138931.50	-4.95	.000
Nondiscriminatory Evaluation Principle	35050.50	138335.50	-4.49	.000
Appropriate Education Principle	35886.50	139171.50	-3.94	.000
Least Restrictive Environment Principle	39469.50	142754.50	-2.15	.031
Procedural Due Process Principle	35386.00	138671.00	-4.12	.000
Parent And Student Participation Principle	36426.00	139711.00	-3.63	.000
Definition Of An Individualized Education Program	37828.00	141113.00	-3.01	.003
Individualized Education Program Process	39325.00	142610.00	-2.26	.024

Attended professional development. The Mann-Whitney U test indicated significant differences among participant ratings of their own legal knowledge when compared by participants' participation in professional development. As with previous results, those who attended professional development indicated they knew more than those who indicated they did not attend professional development. Table 79 and Table 80 show the full results.

Table 79

Mann Whitney U Test Ranks, Professional Development and Legal Principles

<i>Principle</i>	<i>Attended Prof. Dev.</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>
IDEA	Yes	654	519.54	339782.00
	No	349	469.12	163724.00
	Total	1003		
Zero Reject Principle	Yes	654	517.11	338187.50
	No	349	473.69	165318.50
	Total	1003		
Nondiscriminatory Evaluation Principle	Yes	654	532.62	348331.50
	No	349	444.63	155174.50
	Total	1003		
Appropriate Education Principle	Yes	654	536.22	350689.50
	No	349	437.87	152816.50
	Total	1003		
Least Restrictive Environment Principle	Yes	654	546.24	357242.00
	No	349	419.09	146264.00
	Total	1003		
Procedural Due Process Principle	Yes	654	541.05	353846.50
	No	349	428.82	149659.50
	Total	1003		
Parent And Student Participation Principle	Yes	654	540.92	353764.00
	No	349	429.06	149742.00
	Total	1003		
Definition Of An Individualized Education Program	Yes	654	554.14	362406.00
	No	349	404.30	141100.00
	Total	1003		
Individualized Education Program Process	Yes	654	553.24	361816.50
	No	349	405.99	141689.50
	Total	1003		

Table 80

Mann Whitney U Test Statistics, Professional Development and Legal Principles

<i>Principle vs. Attended Professional Development</i>	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig. (2-tailed)</i>
IDEA	102649.00	163724.00	-2.89	.004
Zero Reject Principle	104243.50	165318.50	-3.02	.003
Nondiscriminatory Evaluation Principle	94099.50	155174.50	-5.15	.000
Appropriate Education Principle	91741.50	152816.50	-5.54	.000
Least Restrictive Environment Principle	85189.00	146264.00	-6.78	.000
Procedural Due Process Principle	88584.50	149659.50	-6.17	.000
Parent And Student Participation Principle	88667.00	149742.00	-6.14	.000
Definition Of An Individualized Education Program	80025.00	141100.00	-8.14	.000
Individualized Education Program Process	80614.50	141689.50	-7.94	.000

Completed personal reading and research. The Mann-Whitney U test indicated significant differences among participant ratings of their own legal knowledge when compared by participants' participation their own reading and research about students with special needs. Similar to previous results, those who did their own research and reading indicated they knew more than those who did not. Table 81 and Table 82 show that those who did their own research and reading marked that they knew more than those who did not.

Table 81

Mann Whitney U Test Ranks, Personal Development and Legal Principles

<i>Principle</i>	<i>Did Personal Research</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>
IDEA	Yes	684	542.53	371088.50
	No	319	415.10	132417.50
	Total	1003		
Zero Reject Principle	Yes	684	533.61	364992.00
	No	319	434.21	138514.00
	Total	1003		
Nondiscriminatory Evaluation Principle	Yes	684	540.60	369767.00
	No	319	419.24	133739.00
	Total	1003		
Appropriate Education Principle	Yes	684	549.65	375963.00
	No	319	399.82	127543.00
	Total	1003		
Least Restrictive Environment Principle	Yes	684	550.06	376240.50
	No	319	398.95	127265.50
	Total	1003		
Procedural Due Process Principle	Yes	684	538.84	368569.00
	No	319	423.00	134937.00
	Total	1003		
Parent And Student Participation Principle	Yes	684	538.90	368608.50
	No	319	422.88	134897.50
	Total	1003		
Definition Of An Individualized Education Program	Yes	684	551.42	377172.50
	No	319	396.03	126333.50
	Total	1003		
Individualized Education Program Process	Yes	684	548.02	374843.50
	No	319	403.33	128662.50
	Total	1003		

Table 82

Mann Whitney U Test Statistics, Personal Development and Legal Principles

<i>Principle vs. Personal Research</i>	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig. (2-tailed)</i>
IDEA	81377.50	132417.50	-7.13	.000
Zero Reject Principle	87474.00	138514.00	-6.76	.000
Nondiscriminatory Evaluation Principle	82699.00	133739.00	-6.95	.000
Appropriate Education Principle	76503.00	127543.00	-8.26	.000
Least Restrictive Environment Principle	76225.50	127265.50	-7.88	.000
Procedural Due Process Principle	83897.00	134937.00	-6.22	.000
Parent And Student Participation Principle	83857.50	134897.50	-6.23	.000
Definition of An Individualized Education Program	75293.50	126333.50	-8.25	.000
Individualized Education Program Process	77622.50	128662.50	-7.63	.000

Completed personal development in music. The Mann-Whitney U test indicated significant differences among participant ratings of their own legal knowledge when compared by participants' participation in their own reading and research about teaching music to students with special needs. Table 83 and Table 84 show that those who did research on teaching music with special needs indicated more knowledge than those who did not.

Table 83

Mann Whitney U Test Ranks, Personal Development in Music and Legal Principles

<i>Principle</i>	<i>Personal Research in Music</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>
IDEA	Yes	673	533.54	359072.50
	No	330	437.68	144433.50
	Total	1003		
Zero Reject Principle	Yes	673	531.99	358031.00
	No	330	440.83	145475.00
	Total	1003		
Nondiscriminatory Evaluation Principle	Yes	673	537.09	361464.00
	No	330	430.43	142042.00
	Total	1003		
Appropriate Education Principle	Yes	673	548.89	369400.50
	No	330	406.38	134105.50
	Total	1003		

(continues)

<i>Principle</i>	<i>Personal Research in Music</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>
Least Restrictive Environment Principle	Yes	673	544.33	366333.50
	No	330	415.67	137172.50
	Total	1003		
Procedural Due Process Principle	Yes	673	536.25	360893.00
	No	330	432.16	142613.00
	Total	1003		
Parent And Student Participation Principle	Yes	673	541.09	364154.00
	No	330	422.28	139352.00
	Total	1003		
Definition Of An Individualized Education Program	Yes	673	542.85	365338.50
	No	330	418.69	138167.50
	Total	1003		
Individualized Education Program Process	Yes	673	540.50	363755.00
	No	330	423.49	139751.00
	Total	1003		

Table 84

Mann Whitney U Test Statistics, Personal Development in Music and Legal Principles

<i>Item vs. Personal Research in Music</i>	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig. (2-tailed)</i>
IDEA	89818.50	144433.50	-5.41	.000
Zero Reject Principle	90860.00	145475.00	-6.26	.000
Nondiscriminatory Evaluation Principle	87427.00	142042.00	-6.16	.000
Appropriate Education Principle	79490.50	134105.50	-7.92	.000
Least Restrictive Environment Principle	82557.50	137172.50	-6.77	.000
Procedural Due Process Principle	87998.00	142613.00	-5.64	.000
Parent And Student Participation Principle	84737.00	139352.00	-6.44	.000
Definition Of An Individualized Education Program	83552.50	138167.50	-6.65	.000
Individualized Education Program Process	85136.00	139751.00	-6.22	.000

Class taught with special needs. Data were recoded to indicate whether they did or did not teach a class with special needs students each day. The Mann-Whitney U test indicated significant differences among participant ratings of their own legal knowledge by whether they taught a class with students with special needs. Table 85 and Table 86 show that those who teach special needs students indicated they knew more than those who did not.

Table 85

Mann Whitney U Test Ranks, Classes Taught with Special Needs and Legal Principles

<i>Principle</i>	<i>Taught a Class</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>
IDEA	Yes	896	509.20	456239.00
	No	107	441.75	47267.00
	Total	1003		
Zero Reject Principle	Yes	896	503.91	451505.00
	No	107	485.99	52001.00
	Total	1003		
Nondiscriminatory Evaluation Principle	Yes	896	507.01	454283.50
	No	107	460.02	49222.50
	Total	1003		
Appropriate Education Principle	Yes	896	509.39	456412.00
	No	107	440.13	47094.00
	Total	1003		
Least Restrictive Environment Principle	Yes	896	514.86	461311.50
	No	107	394.34	42194.50
	Total	1003		
Procedural Due Process Principle	Yes	896	510.38	457304.50
	No	107	431.79	46201.50
	Total	1003		
Parent And Student Participation Principle	Yes	896	511.25	458083.00
	No	107	424.51	45423.00
	Total	1003		
Definition Of An Individualized Education Program	Yes	896	518.21	464319.50
	No	107	366.23	39186.50
	Total	1003		
Individualized Education Program Process	Yes	896	516.14	462457.50
	No	107	383.63	41048.50
	Total	1003		

Table 86

Mann Whitney U Test Statistics, Classes Taught with Special Needs and Legal Principles

<i>Principle vs. Taught a Class</i>	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig (2-tailed)</i>
IDEA	41489.00	47267.00	-2.50	.012
Zero Reject Principle	46223.00	52001.00	-0.81	.419
Nondiscriminatory Evaluation Principle	43444.50	49222.50	-1.78	.075
Appropriate Education Principle	41316.00	47094.00	-2.53	.011
Least Restrictive Environment Principle	36416.50	42194.50	-4.17	.000
Procedural Due Process Principle	40423.50	46201.50	-2.80	.005
Parent And Student Participation Principle	39645.00	45423.00	-3.09	.002
Definition Of An Individualized Education Program	33408.50	39186.50	-5.35	.000
Individualized Education Program Process	35270.50	41048.50	-4.63	.000

Self-contained class taught. There were no significant differences according to the Mann-Whitney U test (see Table 88). Table 87 shows the Mann-Whitney U Test frequencies and mean ranks.

Table 87

Mann Whitney U Test Ranks, Teach a self-contained class and Legal Principles

<i>Principle</i>	<i>Taught a Class</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>
IDEA	Yes	127	533.30	67728.50
	No	876	497.46	435777.50
	Total	1003		
Zero Reject Principle	Yes	127	520.85	66148.50
	No	876	499.27	437357.50
	Total	1003		
Nondiscriminatory Evaluation Principle	Yes	127	520.64	66121.50
	No	876	499.30	437384.50
	Total	1003		
Appropriate Education Principle	Yes	127	534.67	67902.50
	No	876	497.26	435603.50
	Total	1003		
Least Restrictive Environment Principle	Yes	127	527.19	66953.00
	No	876	498.35	436553.00
	Total	1003		
Procedural Due Process Principle	Yes	127	491.05	62363.50
	No	876	503.59	441142.50
	Total	1003		
Parent And Student Participation Principle	Yes	127	497.85	63227.50
	No	876	502.60	440278.50
	Total	1003		
Definition Of An Individualized Education Program	Yes	127	531.85	67545.00
	No	876	497.67	435961.00
	Total	1003		
Individualized Education Program Process	Yes	127	502.11	63768.00
	No	876	501.98	439738.00
	Total	1003		

Table 88

Mann Whitney U Test Statistics, Teach a self-contained class and Legal Principles

<i>Teach a self-contained class</i>	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig. (2-tailed)</i>
IDEA	51651.50	435777.50	-1.43	.152
Zero Reject Principle	53231.50	437357.50	-1.05	.294
Nondiscriminatory Evaluation Principle	53258.50	437384.50	-0.87	.383
Appropriate Education Principle	51477.50	435603.50	-1.47	.141
Least Restrictive Environment Principle	52427.00	436553.00	-1.07	.283
Procedural Due Process Principle	54235.50	62363.50	-0.48	.631
Parent And Student Participation Principle	55099.50	63227.50	-0.18	.856
Definition Of An Individualized Education Program	51835.00	435961.00	-1.30	.195
Individualized Education Program Process	55612.00	439738.00	0.00	.996

How Often Music Educators Participate Comparisons

As a reminder, Table 33 shows the descriptive statistics for how often music educators participate in special needs processes. Comparisons were computed by state, highest degree earned, grade level(s) taught, coursework information, professional development, personal development, whether participants taught at least one class with special needs students, and whether they taught at least one self-contained class. Overall, it appears those with a Master's degree (over a Bachelor's), who had training, or who did their own research, who taught older students, and who taught special needs students participated more, had more help, were more comfortable, and were more confident with special needs processes.

State. Kruskal-Wallis and post hoc Chi-Square showed significant differences by state (see Table 89). Mann-Whitney tests indicated the specific significant differences among participant ratings of their own participation in special needs processes when compared by state. Table 90 shows frequencies, mean ranks, significance, and where the differences occurred between teachers in specific states. The mean ranks in Table 90 indicate differences in participation and comfort in participation, though the margins of difference in each case are rather small.

Table 89

Kruskal-Wallis Ranks and Chi-Square, Participation by State

<i>Item</i>	<i>State</i>	<i>N</i>	<i>Mean Rank</i>	<i>Chi-Square</i>	<i>df</i>	<i>Asymp. Sig.</i>
I participate in the IEP process.	AL	191	501.34	12.703	6	0.048
	FL	90	447.22			
	GA	153	528.91			
	NC	281	502.38			
	SC	65	579.98			
	TN	74	483.05			
	VA	144	464.99			
	Total	998				
I receive information about individual students and their needs.	AL	191	515.68	28.145	6	0.00
	FL	90	425.49			
	GA	153	521.75			
	NC	281	449.51			
	SC	65	564.18			
	TN	74	554.61			
	VA	144	540.69			
	Total	998				
I am comfortable providing accommodations or modifications.	AL	191	537.08	10.94	6	0.09
	FL	90	522.74			
	GA	153	447.42			
	NC	281	491.48			
	SC	65	515.58			
	TN	74	518.78			
	VA	144	488.96			
	Total	998				
I am confident in my abilities with students with special needs.	AL	191	516.73	10.94	6	0.09
	FL	90	511.08			
	GA	153	477.37			
	NC	281	483.78			
	SC	65	526.52			
	TN	74	535.72			
	VA	144	492.78			
	Total	998				
I have assistance from a paraprofessional or other instructional aid.	AL	191	508.55	12.902	6	0.045
	FL	90	474.25			
	GA	153	460.01			
	NC	281	519.58			
	SC	65	543.67			
	TN	74	554.15			
	VA	144	458.04			
	Total	998				

Table 90

Mann Whitney U Test Ranks, Participation and State

<i>Item</i>	<i>State</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig. (2-tailed)</i>
I participate in the IEP process.	FL	90	109.57	9861.00	5766.00	9861.00	-2.17	.030
	GA	153	129.31	19785.00				
	Total	243						
	FL	90	69.44	6249.50	2154.50	6249.50	-2.88	.004
	SC	65	89.85	5840.50				
	Total	155						
	GA	153	158.24	24210.00	9603.00	20043.00	-1.97	.049
	VA	144	139.19	20043.00				
	Total	297						
I receive information about individual students and their needs.	AL	191	148.93	28445.50	7080.50	11175.50	-2.52	.012
	FL	90	124.17	11175.50				
	Total	281						
	AL	191	254.59	48627.50	23379.50	63000.50	-2.51	.012
	NC	281	224.20	63000.50				
	Total	472						
	FL	90	107.35	9661.50	5566.50	9661.50	-2.63	.008
	GA	153	130.62	19984.50				
	Total	243						
	FL	90	69.32	6239.00	2144.00	6239.00	-3.01	.003
	SC	65	90.02	5851.00				
	Total	155						
	FL	90	73.31	6598.00	2503.00	6598.00	-2.89	.004
	TN	74	93.68	6932.00				
	Total	164						
FL	90	100.64	9058.00	4963.00	9058.00	-3.21	.001	
VA	144	128.03	18437.00					
Total	234							
GA	153	238.00	36414.00	18360.00	57981.00	-2.65	.008	
NC	281	206.34	57981.00					
Total	434							
I have assistance from a paraprofessional or other instructional aid.	FL	90	76.55	6889.50	2794.50	6889.50	-1.81	.070
	TN	74	89.74	6640.50				
	Total	164						
	GA	153	200.37	30656.00	18875.00	30656.00	-2.15	.031
	NC	281	226.83	63739.00				
	Total	434						
	GA	153	104.10	15928.00	4147.00	15928.00	-1.99	.047
	SC	65	122.20	7943.00				
	Total	218						
	GA	153	107.05	16379.00	4598.00	16379.00	-2.36	.019
TN	74	128.36	9499.00					
Total	227							

Highest degree earned. Kruskal-Wallis and post hoc Chi-Square tests indicated no significant differences in respondents' participation in special needs processes. Table 91 shows the results.

Table 91

Kruskal-Wallis Ranks and Chi-Square, Participation and Highest Degree Earned

<i>Item</i>	<i>Highest Degree</i>	<i>N</i>	<i>Mean Rank</i>	<i>Chi-Square</i>	<i>df</i>	<i>Asymp. Sig.</i>
I participate in the IEP process.	Bachelors	376	478.88	8.044	5	.154
	Alt Masters	6	716.92			
	Masters	508	503.87			
	Ed.S.	46	539.90			
	Ph.D./D.M.A.	59	534.86			
	Less than a Bachelors	3	595.00			
	Total	998				
I receive information about individual students and their needs.	Bachelors	376	472.38	8.610	5	.126
	Alt Masters	6	642.25			
	Masters	508	518.17			
	Ed.S.	46	475.80			
	Ph.D./D.M.A.	59	518.25			
	Less than a Bachelors	3	447.00			
	Total	998				
I provide accommodations or modifications.	Bachelors	376	488.90	5.994	5	.307
	Alt Masters	6	723.50			
	Masters	508	500.90			
	Ed.S.	46	492.55			
	Ph.D./D.M.A.	59	537.83			
	Less than a Bachelors	3	494.67			
	Total	998				
I am comfortable providing accommodations or modifications.	Bachelors	376	485.60	7.490	5	.187
	Alt Masters	6	754.25			
	Masters	508	503.39			
	Ed.S.	46	488.40			
	Ph.D./D.M.A.	59	535.34			
	Less than a Bachelors	3	538.83			
	Total	998				

(continues)

<i>Item</i>	<i>Highest Degree</i>	<i>N</i>	<i>Mean Rank</i>	<i>Chi-Square</i>	<i>df</i>	<i>Asymp. Sig.</i>
I am confident in my abilities with students with special needs.	Bachelors	376	472.77	8.632	5	.125
	Alt Masters	6	704.75			
	Masters	508	514.18			
	Ed.S.	46	511.39			
	Ph.D./D.M.A.	59	513.77			
	Less than a Bachelors	3	490.00			
	Total	998				
I have assistance from a paraprofessional or other instructional aid.	Bachelors	376	491.84	4.413	5	.492
	Alt Masters	6	475.83			
	Masters	508	508.71			
	Ed.S.	46	433.39			
	Ph.D./D.M.A.	59	515.55			
	Less than a Bachelors	3	645.83			
	Total	998				

Grade levels taught. Kruskal-Wallis tests and post-hoc Chi-Square indicated significant differences (see Table 92). Subsequent Mann-Whitney tests indicated where the differences occurred. Table 93 shows the frequencies, mean ranks, and the test statistics. Mann Whitney U indicated where the specific differences exist. In general, those who teach older students indicated they participate in the process more than those who teach younger students.

Table 92

Kruskal-Wallis Ranks and Chi-Square, Participation and Grade Levels Taught

<i>Item</i>	<i>Grade Levels</i>	<i>N</i>	<i>Mean Rank</i>	<i>Chi-Square</i>	<i>df</i>	<i>Asymp. Sig.</i>
I participate in the IEP process.	PreK	1	516.5	211.767	8	0.00
	Elem	282	303.61			
	MS	251	489.51			
	HS	193	640.48			
	Collegiate	15	556.3			
	Other	4	451.88			
	Elem MS	40	377.66			
	Elem HS	9	434.72			
	MS HS	133	520.83			
	Total	928				

(continues)

<i>Item</i>	<i>Grade Levels</i>	<i>N</i>	<i>Mean Rank</i>	<i>Chi-Square</i>	<i>df</i>	<i>Asymp. Sig.</i>
I receive information about individual students and their needs.	PreK	1	47	96.844	8	0.00
	Elem	282	362.17			
	MS	251	485.79			
	HS	193	576.8			
	Collegiate	15	467.43			
	Other	4	537.13			
	Elem MS	40	393.74			
	Elem HS	9	440.83			
	MS HS	133	501.84			
Total	928					
I provide accommodations or modifications.	PreK	1	692.5	42.17	8	0.00
	Elem	282	399.51			
	MS	251	467.25			
	HS	193	523.2			
	Collegiate	15	593.47			
	Other	4	494.88			
	Elem MS	40	402.79			
	Elem HS	9	487.39			
	MS HS	133	511.77			
Total	928					
I am comfortable providing accommodations or modifications.	PreK	1	727	62.86	8	0.00
	Elem	282	387.2			
	MS	251	450.17			
	HS	193	551.8			
	Collegiate	15	606.27			
	Other	4	629.63			
	Elem MS	40	436.39			
	Elem HS	9	522.67			
	MS HS	133	510.36			
Total	928					
I am confident in my abilities with students with special needs.	PreK	1	238	34.977	8	0.00
	Elem	282	411.57			
	MS	251	451.02			
	HS	193	542.5			
	Collegiate	15	534.93			
	Other	4	571.63			
	Elem MS	40	443.65			
	Elem HS	9	439.89			
	MS HS	133	487.47			
Total	928					
I have assistance from a paraprofessional or other instructional aid.	PreK	1	542	27.988	8	0.00
	Elem	282	515.64			
	MS	251	444.89			
	HS	193	470.6			
	Collegiate	15	545.5			
	Other	4	576.63			
	Elem MS	40	359.83			
	Elem HS	9	397.89			
	MS HS	133	407.13			
Total	928					

Table 93

Mann-Whitney U, Participation and Grade Levels Taught

Item	Level(s) Taught	N	Mean Rank	Sum of Ranks	U	W	Z	Asymp. Sig. (2-tailed)	Exact Sig. *
I participate in the IEP process.	Elem	282	212.68	59976.50	20073.50	59976.50	-8.96	.000	
	MS	251	328.03	82334.50					
	Total	533							
	Elem	282	170.59	48106.00	8203.00	48106.00	-13.31	.000	
	HS	193	336.50	64944.00					
	Total	475							
	Elem	282	145.87	41135.00	1232.00	41135.00	-2.86	.004	
	Collegiate	15	207.87	3118.00					
	Total	297							
	Elem	282	176.99	49911.50	10008.50	49911.50	-7.95	.000	
	MS HS	133	273.75	36408.50					
	Total	415							
	Elem	282	168.06	47394.00	7491.00	47394.00	-3.10	.002	
	Elem MS HS	69	208.43	14382.00					
	Total	351							
MS	251	187.15	46973.50	15347.50	46973.50	-6.92	.000		
HS	193	268.48	51816.50						
Total	444								
MS	251	151.09	37923.50	3742.50	4562.50	-2.71	.007		
Elem MS	40	114.06	4562.50						
Total	291								
HS	193	127.58	24623.00	1818.00	2638.00	-5.48	.000		
Elem MS	40	65.95	2638.00						
Total	233								
HS	193	103.62	19999.00	459.00	504.00	-2.50	.012		
Elem HS	9	56.00	504.00						
Total	202								
HS	193	181.20	34971.50	9418.50	18329.50	-4.24	.000		
MS HS	133	137.82	18329.50						
Total	326								
I participate in the IEP process.	HS	193	145.79	28137.00	3901.00	6316.00	-5.27	.000	
	Elem MS HS	69	91.54	6316.00					
	Total	262							
	Elem MS	40	66.99	2679.50	1859.50	2679.50	-2.97	.003	
	MS HS	133	93.02	12371.50					
	Total	173							
	MS HS	133	108.14	14382.00	3706.00	6121.00	-2.30	.022	
Elem MS HS	69	88.71	6121.00						
Total	202								

Note. *2(1-tailed Sig.) b. Not corrected for ties.

(continues)

<i>Item</i>	<i>Level(s) Taught</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig. (2-tailed)</i>	<i>Exact Sig.*</i>
I receive information about individual students and their needs.	PreK	1	4.00	4.00	3.00	4.00	-2.00	.045	.041 ^b
	HS	193	97.98	18911.00					
	Total	194							
	Elem	282	231.41	65259.00	25356.00	65259.00	-5.95	.000	
	MS	251	306.98	77052.00					
	Total	533							
	Elem	282	194.51	54852.50	14949.50	54852.50	-8.89	.000	
	HS	193	301.54	58197.50					
	Total	475							
	MS	251	201.56	50592.50	18966.50	50592.50	-4.38	.000	
	HS	193	249.73	48197.50					
	Total	444							
	MS	251	150.02	37655.50	4010.50	4830.50	-2.20	.028	
	Elem MS	40	120.76	4830.50					
	Total	291							
	MS	251	168.85	42381.50	6563.50	8978.50	-3.28	.001	
	Elem MS HS	69	130.12	8978.50					
	Total	320							
	HS	193	124.33	23996.00	2445.00	3265.00	-4.19	.000	
	Elem MS	40	81.63	3265.00					
Total	233								
HS	193	174.68	33714.00	10676.00	19587.00	-2.97	.003		
MS HS	133	147.27	19587.00						
Total	326								
HS	193	144.91	27967.00	4071.00	6486.00	-5.36	.000		
Elem MS HS	69	94.00	6486.00						
Total	262								
Elem MS	40	71.93	2877.00	2057.00	2877.00	-2.34	.019		
MS HS	133	91.53	12174.00						
Total	173								
MS HS	133	110.53	14700.50	3387.50	5802.50	-3.24	.001		
Elem MS HS	69	84.09	5802.50						
Total	202								

Note. *2(1-tailed Sig.) b. Not corrected for ties.

(continues)

<i>Item</i>	<i>Level(s) Taught</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig. (2-tailed)</i>	<i>Exact Sig.*</i>
I provide accommodations or modifications.	Elem	282	248.08	69959.00	30056.00	69959.00	-3.20	.001	
	MS	251	288.25	72352.00					
	Total	533							
	Elem	282	212.21	59843.50	19940.50	59843.50	-5.29	.000	
	HS	193	275.68	53206.50					
	Total	475							
	Elem	282	145.99	41170.00	1267.00	41170.00	-2.77	.006	
	Collegiate	15	205.53	3083.00					
	Total	297							
	Elem	282	192.02	54150.00	14247.00	54150.00	-4.21	.000	
	MS HS	133	241.88	32170.00					
	Total	415							
	MS	251	210.48	52830.50	21204.50	52830.50	-2.46	.014	
	HS	193	238.13	45959.50					
	Total	444							
	MS	251	131.40	32981.00	1355.00	32981.00	-1.97	.049	
	Collegiate	15	168.67	2530.00					
	Total	266							
	HS	193	121.92	23530.50	2910.50	3730.50	-2.70	.007	
	Elem MS	40	93.26	3730.50					
Total	233								
HS	193	138.48	26726.50	5311.50	7726.50	-2.71	.007		
Elem MS HS	69	111.98	7726.50						
Total	262								
Collegiate	15	35.33	530.00	190.00	1010.00	-2.21	.027		
Elem MS	40	25.25	1010.00						
Total	55								
Collegiate	15	53.93	809.00	346.00	2761.00	-2.09	.037		
Elem MS HS	69	40.01	2761.00						
Total	84								
Elem MS	40	72.49	2899.50	2079.50	2899.50	-2.30	.021		
MS HS	133	91.36	12151.50						
Total	173								
MS HS	133	107.64	14316.50	3771.50	6186.50	-2.24	.025		
Elem MS HS	69	89.66	6186.50						
Total	202								
Elem	282	249.03	70227.00	30324.00	70227.00	-3.01	.003		
MS	251	287.19	72084.00						
Total	533								
Elem	282	204.10	57557.50	17654.50	57557.50	-6.87	.000		
HS	193	287.53	55492.50						
Total	475								
Elem	282	145.75	41101.00	1198.00	41101.00	-2.98	.003		
Collegiate	15	210.13	3152.00						
Total	297								
Elem	282	190.55	53734.00	13831.00	53734.00	-4.54	.000		
MS HS	133	245.01	32586.00						
Total	415								

Note. *2(1-tailed Sig.) b. Not corrected for ties.

(continues)

<i>Item</i>	<i>Level(s) Taught</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig. (2-tailed)</i>	<i>Exact Sig.*</i>
I am comfortable providing accommodations or modifications.	Elem	282	169.16	47702.50	7799.50	47702.50	-2.69	.007	
	Elem MS HS	69	203.96	14073.50					
	Total	351							
	MS	251	200.61	50353.00	18727.00	50353.00	-4.40	.000	
	HS	193	250.97	48437.00					
	Total	444							
	MS	251	130.93	32863.50	1237.50	32863.50	-2.36	.018	
	Collegiate	15	176.50	2647.50					
	Total	266							
	MS	251	183.57	46076.00	14450.00	46076.00	-2.30	.021	
MS HS	133	209.35	27844.00						
Total	384								
HS	193	121.94	23534.50	2906.50	3726.50	-2.70	.007		
Elem MS	40	93.16	3726.50						
Total	233								
Collegiate	15	34.93	524.00	196.00	1016.00	-2.07	.039		
Elem MS	40	25.40	1016.00						
Total	55								
I am confident in my abilities with students with special needs.	Elem	282	197.07	55575.00	15672.00	55575.00	-2.86	.004	
	MS HS	133	231.17	30745.00					
	Total	415							
	MS	251	203.15	50991.00	19365.00	50991.00	-3.80	.000	
	HS	193	247.66	47799.00					
	Total	444							
	HS	193	121.11	23373.50	3067.50	3887.50	-2.14	.033	
	Elem MS	40	97.19	3887.50					
	Total	233							
	HS	193	138.26	26684.00	5354.00	7769.00	-2.52	.012	
Elem MS HS	69	112.59	7769.00						
Total	262								
I have assistance from a paraprofessional or other instructional aid.	Elem	282	286.38	80758.00	29927.00	61553.00	-3.16	.002	
	MS	251	245.23	61553.00					
	Total	533							
	Elem	282	168.30	47462.00	3721.00	4541.00	-3.60	.000	
	Elem MS	40	113.53	4541.00					
	Total	322							
	Elem	282	224.04	63178.00	14231.00	23142.00	-4.08	.000	
	MS HS	133	174.00	23142.00					
	Total	415							
	Elem	282	181.35	51140.00	8221.00	10636.00	-2.05	.040	
Elem MS HS	69	154.14	10636.00						
Total	351								

Note. *2(1-tailed Sig.) b. Not corrected for ties.

(continues)

<i>Item</i>	<i>Level(s) Taught</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig. (2-tailed)</i>	<i>Exact Sig.*</i>
I have assistance from a paraprofessional or other instructional aid.	HS	193	121.61	23470.50	2970.50	3790.50	-2.35	.019	
	Elem MS	40	94.76	3790.50					
	Total	233							
	HS	193	172.26	33247.00	11143.00	20054.00	-2.08	.038	
	MS HS	133	150.78	20054.00					
	Total	326							
	Collegiate	15	34.67	520.00	200.00	1020.00	-1.97	.049	
	Elem MS	40	25.50	1020.00					
	Total	55							

Note. *2(1-tailed Sig.) b. Not corrected for ties.

Coursework information. Mann-Whitney U tests indicated significant differences for music educators' participation when compared with whether they had coursework. Table 94 shows frequencies and mean ranks, while Table 95 shows where those differences exist. Specifically, those who had coursework overall participated more than those who did not.

Table 94

Mann-Whitney U Test Ranks, Participation and Coursework

<i>Item</i>	<i>Had Coursework</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>
I participate in the IEP process.	Yes	644	512.56	330085.50
	No	354	475.75	168415.50
	Total	998		
I receive information about individual students and their needs.	Yes	644	514.55	331370.00
	No	354	472.12	167131.00
	Total	998		
I provide accommodations or modifications.	Yes	644	512.30	329919.00
	No	354	476.22	168582.00
	Total	998		
I am confident in my abilities with students with special needs.	Yes	644	519.99	334871.00
	No	354	462.23	163630.00
	Total	998		
I have assistance from a paraprofessional or other instructional aid.	Yes	644	514.75	331499.50
	No	354	471.76	167001.50
	Total	998		

Table 95

Mann-Whitney U Test Statistics, Participation and Coursework

<i>Item vs. Had Coursework</i>	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig. (2-tailed)</i>
I participate in the IEP process.	105580.50	168415.50	-1.99	.047
I receive information about individual students and their needs.	104296.00	167131.00	-2.37	.018
I provide accommodations or modifications.	105747.00	168582.00	-2.03	.043
I am confident in my abilities with students with special needs.	100795.00	163630.00	-3.18	.001
I have assistance from a paraprofessional or other instructional aid.	104166.50	167001.50	-2.31	.021

Coursework had music content. Mann-Whitney U tests indicated significant differences for music educators' participation when compared with whether they had coursework with music-specific content. Table 96 shows frequencies and mean ranks, while table 97 shows where those differences exist. As with the previous item, those who had music-specific coursework participated, provided accommodations, had more confidence, and had more help than those who did not.

Table 96

Mann-Whitney U Test Ranks, Participation and Coursework with Music Content

<i>Item</i>	<i>Coursework Had Music Content</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>
I participate in the IEP process.	Yes	307	349.84	107401.00
	No	337	297.59	100289.00
	Total	644		
I provide accommodations or modifications.	Yes	307	348.22	106904.50
	No	337	299.07	100785.50
	Total	644		
I am comfortable providing accommodations or modifications.	Yes	307	345.84	106172.00
	No	337	301.24	101518.00
	Total	644		
I am confident in my abilities with students with special needs.	Yes	307	348.95	107129.00
	No	337	298.40	100561.00
	Total	644		
I have assistance from a paraprofessional or other instructional aid.	Yes	307	340.04	104391.50
	No	337	306.52	103298.50
	Total	644		

Table 97

Mann-Whitney U Test Statistics, Participation and Coursework with Music Content

<i>Item (vs. Coursework Had Music Content)</i>	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig. (2-tailed)</i>
I participate in the IEP process.	43336.00	100289.00	-3.67	.000
I provide accommodations or modifications.	43832.50	100785.50	-3.64	.000
I am comfortable providing accommodations or modifications.	44565.00	101518.00	-3.23	.001
I am confident in my abilities with students with special needs.	43608.00	100561.00	-3.63	.000
I have assistance from a paraprofessional or other instructional aid.	46345.50	103298.50	-2.34	.019

Coursework had fieldwork. Mann-Whitney U tests indicated significant differences for music educators' participation when compared with whether they had coursework with fieldwork. Table 98 shows frequencies and mean ranks, while table 99 shows where those differences exist. Those who had fieldwork with special needs indicated they participate, are more comfortable, and have more help than those who did not, though the margins of difference are smaller than on previous items.

Table 98

Mann-Whitney U Test Ranks, Participation and Coursework with Fieldwork

<i>Course work Had Field Placements</i>		<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>
I participate in the IEP process.	Yes	192	345.57	66348.50
	No	452	312.70	141341.50
	Total	644		
I am comfortable providing accommodations or modifications.	Yes	192	356.23	68396.50
	No	452	308.17	139293.50
	Total	644		
I am confident in my abilities with students with special needs.	Yes	192	363.74	69839.00
	No	452	304.98	137851.00
	Total	644		
I have assistance from a paraprofessional or other instructional aid.	Yes	192	336.45	64599.00
	No	452	316.57	143091.00
	Total	644		

Table 99

Mann-Whitney U Test Statistics, Participation and Coursework with Fieldwork

Item	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig. (2-tailed)</i>
I participate in the IEP process.	38963.5	141341.5	-2.114	0.035
I am comfortable providing accommodations or modifications.	36915.5	139293.5	-3.19	0.001
I am confident in my abilities with students with special needs.	35473	137851	-3.86	0.00
I have assistance from a paraprofessional or other instructional aid.	40713	143091	-1.271	0.204

Attended professional development. Mann-Whitney test showed significant differences when comparing music educators' participation and whether they attended professional development. Table 100 shows frequencies and mean ranks. Table 101 shows the Mann-Whitney U statistics. The trend for these items appears to continue. Those who attended professional development indicated higher levels of participation in and comfort with special needs processes than those who did not.

Table 100

Mann-Whitney U Test Ranks, Participation and Professional Development

<i>Item</i>	<i>Attended Prof. Dev.</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>
I participate in the IEP process.	Yes	652	523.93	341604.00
	No	346	453.46	156897.00
	Total	998		
I receive information about individual students and their needs.	Yes	652	518.15	337835.00
	No	346	464.35	160666.00
	Total	998		
I provide accommodations or modifications.	Yes	652	531.43	346494.00
	No	346	439.33	152007.00
	Total	998		
I am comfortable providing accommodations or modifications.	Yes	652	524.61	342043.50
	No	346	452.19	156457.50
	Total	998		
I am confident in my abilities with students with special needs.	Yes	652	532.68	347310.00
	No	346	436.97	151191.00
	Total	998		
I have assistance from a paraprofessional or other instructional aid.	Yes	652	519.61	338786.50
	No	346	461.60	159714.50
	Total	998		

Table 101

Mann-Whitney U Test Statistics, Participation and Professional Development

<i>Item vs. Attended Professional Development</i>	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig. (2-tailed)</i>
I participate in the IEP process.	96866.00	156897.00	-3.79	.000
I receive information about individual students and their needs.	100635.00	160666.00	-2.99	.003
I provide accommodations or modifications.	91976.00	152007.00	-5.15	.000
I am confident in my abilities with students with special needs.	91160.00	151191.00	-5.25	.000
I have assistance from a paraprofessional or other instructional aid.	99683.50	159714.50	-3.10	.002

Completed personal reading and research. Mann-Whitney U tests showed significant differences when comparing music educators' participation and whether they completed their own personal reading and research about students with special needs. Table 102 and Table 103 show that those who did their own research generally participated in the process more than those who did not.

Table 102

Mann-Whitney U Test Ranks, Participation and Personal Development

<i>Item</i>	<i>Did Personal Research</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>
I receive information about individual students and their needs.	Yes	681	518.12	352841.50
	No	317	459.49	145659.50
	Total	998		
I provide accommodations or modifications.	Yes	681	527.98	359556.50
	No	317	438.31	138944.50
	Total	998		
I am comfortable providing accommodations or modifications.	Yes	681	526.69	358673.50
	No	317	441.10	139827.50
	Total	998		
I am confident in my abilities with students with special needs.	Yes	681	528.19	359700.50
	No	317	437.86	138800.50
	Total	998		

Table 103

Mann-Whitney U Test Statistics, Participation and Personal Development

<i>Item vs. Personal Research</i>	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig. (2-tailed)</i>
I receive information about individual students and their needs.	95256.50	145659.50	-3.19	.001
I provide accommodations or modifications.	88541.50	138944.50	-4.91	.000
I am comfortable providing accommodations or modifications.	89424.50	139827.50	-4.62	.000
I am confident in my abilities with students with special needs.	88397.50	138800.50	-4.84	.000

Completed personal development in music. Mann-Whitney U tests showed significant differences when comparing music educators' participation and whether they completed their own personal development in music. As in the previous item, Table 104 and Table 105 show that those who did their own research on teaching special needs and music indicated higher participation, confidence, and instructional assistance levels.

Table 104

Mann-Whitney U Test Ranks, Participation and Personal Development in Music

<i>Item</i>	<i>Personal Research in Music</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>
I receive information about individual students and their needs.	Yes	672	513.37	344981.50
	No	326	470.92	153519.50
	Total	998		
I provide accommodations or modifications.	Yes	672	533.92	358792.50
	No	326	428.55	139708.50
	Total	998		
I am comfortable providing accommodations or modifications.	Yes	672	523.97	352108.00
	No	326	449.06	146393.00
	Total	998		
I am confident in my abilities with students with special needs.	Yes	672	527.13	354229.50
	No	326	442.55	144271.50
	Total	998		
I have assistance from a paraprofessional or other instructional aid.	Yes	672	513.18	344856.00
	No	326	471.30	153645.00
	Total	998		

Table 105

Mann-Whitney U Test Statistics, Participation and Personal Development in Music

<i>Item vs. Personal Research - Music</i>	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig. (2-tailed)</i>
I receive information about individual students and their needs.	100218.50	153519.50	-2.32	.020
I provide accommodations or modifications.	86407.50	139708.50	-5.81	.000
I am comfortable providing accommodations or modifications.	93092.00	146393.00	-4.07	.000
I am confident in my abilities with students with special needs.	90970.50	144271.50	-4.57	.000
I have assistance from a paraprofessional or other instructional aid.	100344.00	153645.00	-2.21	.027

Class taught with special needs. Data were recoded to indicate whether they did or did not teach a class with special needs students each day. Mann-Whitney U test indicated no significant differences when comparing music educators' participation and whether they taught at least one class with students with special needs. Table 106 and Table 107 show the results.

Table 106

Mann Whitney U Ranks, Participation and Taught a Class

<i>Item</i>	<i>Taught a Class</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>
I participate in the IEP process.	Yes	893	498.96	445575.00
	No	105	504.06	52926.00
	Total	998		
I receive information about individual students and their needs.	Yes	893	500.69	447118.50
	No	105	489.36	51382.50
	Total	998		
I provide accommodations or modifications.	Yes	893	499.00	445611.00
	No	105	503.71	52890.00
	Total	998		
I am comfortable providing accommodations or modifications.	Yes	893	499.27	445848.50
	No	105	501.45	52652.50
	Total	998		
I am confident in my abilities with students with special needs.	Yes	893	499.03	445632.50
	No	105	503.51	52868.50
	Total	998		
I have assistance from a paraprofessional or other instructional aid.	Yes	893	496.69	443546.50
	No	105	523.38	54954.50
	Total	998		

Table 107

Mann Whitney U Statistics, Participation and Taught a Class

<i>Item vs Taught a class</i>	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig (2-tailed)</i>
I participate in the IEP process.	46404.00	445575.00	-0.18	.860
I receive information about individual students and their needs.	45817.50	51382.50	-0.41	.685
I provide accommodations or modifications.	46440.00	445611.00	-0.17	.865
I am comfortable providing accommodations or modifications.	46677.50	445848.50	-0.08	.938
I am confident in my abilities with students with special needs.	46461.50	445632.50	-0.16	.874
I have assistance from a paraprofessional or other instructional aid.	44375.50	443546.50	-0.92	.358

Self-contained class taught. Mann-Whitney U tests indicated significant differences when comparing music educators' participation and whether they taught a self-contained music class with students with special needs. Table 108 and Table 109 show that those who did not teach a self-contained class participated more often in the IEP process than those who taught a self-contained class. In addition they received less instructional support than those who taught a self-contained class. However, they indicated they received information more often and were more confident in their abilities versus those who taught a self-contained class.

Table 108

Mann Whitney U Ranks, Participation and Taught a Self-contained Class

<i>Item</i>	<i>Taught Self-Contained Class</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>
I participate in the IEP process.	Yes	126	412.87	52022.00
	No	872	512.02	446479.00
	Total	998		
I receive information about individual students and their needs.	Yes	126	438.21	55214.50
	No	872	508.36	443286.50
	Total	998		
I am confident in my abilities with students with special needs.	Yes	126	444.50	56007.50
	No	872	507.45	442493.50
	Total	998		
I have assistance from a paraprofessional or other instructional aid.	Yes	126	622.17	78394.00
	No	872	481.77	420107.00
	Total	998		

Table 109

Mann Whitney U Statistics, Participation and Taught a Self-contained Class

<i>Item vs. Taught a Self-contained Class</i>	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig. (2-tailed)</i>
I participate in the IEP process.	44021.00	52022.00	-3.72	.000
I receive information about individual students and their needs.	47213.50	55214.50	-2.72	.007
I am confident in my abilities with students with special needs.	48006.50	56007.50	-2.41	.016
I have assistance from a paraprofessional or other instructional aid.	39479.00	420107.00	-5.24	.000

Levels of Agreement About Special Needs Comparisons

As a reminder, Table 34 shows the descriptive statistics for level of agreement.

Comparisons were computed by state, highest degree earned, grade level(s) taught, coursework information, professional development, personal development, whether participants taught at least one class with special needs students, and whether they taught at least one self-contained class.

State. Kruskal-Wallis and post hoc Chi-Square tests showed significant differences when comparing agreement and state (see Table 110). Mann-Whitney tests indicated significant differences among participant ratings of their level of agreement when compared by state. Table 111 shows that educators’ views varied when compared by the state in which they taught.

Table 110

Kruskal-Wallis Ranks and Chi-Square, Agreement by State

<i>Item, Students with special needs...</i>	<i>State</i>	<i>N</i>	<i>Mean Rank</i>	<i>Chi-Square</i>	<i>df</i>	<i>Asymp. Sig.</i>
never require modifications	Alabama	190	549.37	17.247	6	.008
	Florida	89	486.88			
	Georgia	153	520.32			
	North Carolina	277	485.99			
	South Carolina	65	504.39			
	Tennessee	74	433.07			
	Virginia	144	456.63			
	Total	992				
should always be in music class(es)	Alabama	190	464.12	17.243	6	.008
	Florida	89	546.51			
	Georgia	153	485.07			
	North Carolina	277	497.60			
	South Carolina	65	555.11			
	Tennessee	74	417.09			
	Virginia	144	532.69			
	Total	992				
do not fit in with other students	Alabama	190	503.12	14.776	6	.022
	Florida	89	569.22			
	Georgia	153	487.63			
	North Carolina	277	505.37			
	South Carolina	65	506.85			
	Tennessee	74	427.73			
	Virginia	144	465.84			
	Total	992				
are not accepted by their peers	Alabama	190	478.26	14.163	6	.028
	Florida	89	561.34			
	Georgia	153	525.65			
	North Carolina	277	498.65			
	South Carolina	65	453.02			
	Tennessee	74	439.67			
	Virginia	144	494.22			
	Total	992				

Table 111

Mann Whitney U, Agreement by State

<i>Item, Students with Special Needs...</i>	<i>State</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig. (2-tailed)</i>
never require modifications	AL	190	251.80	47842.00	22933.00	61436.00	-2.59	.010
	NC	277	221.79	61436.00				
	Total	467						
	AL	190	141.34	26855.50	5349.50	8124.50	-3.34	.001
	TN	74	109.79	8124.50				
	Total	264						
	AL	190	181.00	34389.50	11115.50	21555.50	-3.21	.001
	VA	144	149.69	21555.50				
	Total	334						
	GA	153	225.07	34435.50	19726.50	58229.50	-1.29	.196
	NC	277	210.21	58229.50				
	Total	430						
GA	153	120.48	18433.00	4670.00	7445.00	-2.33	.020	
TN	74	100.61	7445.00					
Total	227							
GA	153	158.15	24197.50	9615.50	20055.50	-2.05	.040	
VA	144	139.27	20055.50					
Total	297							
NC	277	222.05	61509.00					
Total	467							
should always be in music class(es)	AL	190	132.47	25169.00	7024.00	25169.00	-2.36	.018
	FL	89	156.08	13891.00				
	Total	279						
	AL	190	122.14	23206.50	5061.50	23206.50	-2.24	.025
	SC	65	145.13	9433.50				
	Total	255						
	AL	190	157.45	29915.50	11770.50	29915.50	-2.26	.024
	VA	144	180.76	26029.50				
	Total	334						
	FL	89	91.81	8171.50	2419.50	5194.50	-3.02	.003
	TN	74	70.20	5194.50				
	Total	163						

(continues)

<i>Item, Students with Special Needs...</i>	<i>State</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig. (2-tailed)</i>								
do not fit in with other students	AL	190	138.21	26260.00	5945.00	8720.00	-2.19	.029								
	TN	74	117.84	8720.00												
	Total	264														
	FL	89	133.95	11921.50					5700.50	17481.50	-2.29	.022				
	GA	153	114.26	17481.50												
	Total	242														
	FL	89	201.62	17944.00									10714.00	49217.00	-2.02	.043
	NC	277	177.68	49217.00												
	Total	366														
	FL	89	92.72	8252.50												
TN	74	69.10	5113.50													
Total	163															
FL	89	131.71	11722.50	5098.50	15538.50	-2.82	.005									
VA	144	107.91	15538.50													
Total	233															
are not accepted by their peers	AL	190	132.38					25152.50	7007.50	25152.50	-2.59	.010				
	FL	89	156.26					13907.50								
	Total	279														
	FL	89	201.32					17917.50					10740.50	49243.50	-2.05	.040
	NC	277	177.77					49243.50								
	Total	366														
	FL	89	84.19					7493.00								
	SC	65	68.34	4442.00												
	Total	154														
	FL	89	91.16	8113.00	2478.00	5253.00	-3.01	.003								
TN	74	70.99	5253.00													
Total	163															
GA	153	120.44	18427.50	4675.50					7450.50	-2.36	.018					
TN	74	100.68	7450.50													
Total	227															

Highest degree earned. Kruskal-Wallis tests indicated significant differences for music educators' level of agreement on the statement, *special needs students are more expressive than "regular" students* when compared with highest degree earned (see Table 112). Mann-Whitney U tests indicated significant differences among participants' ratings for their level of agreement when compared by highest degree earned. Table 113 shows that for this item, those with only a Bachelors degree felt *students with special needs were more expressive than regular students* than participants who had a Masters degree.

Table 112

Kruskal-Wallis Test, Agreement and Highest Degree Earned

<i>Item, Students with Special Needs...</i>	<i>Highest Degree</i>	<i>N</i>	<i>Mean Rank</i>	<i>Asymp. Sig.</i>
are more expressive than "regular" students	Bachelors	373	522.81	.004
	Alt Masters	6	424.17	
	Masters	505	486.10	
	Ed.S.	46	537.76	
	Ph.D./D.M.A.	59	390.88	
	Less than a Bachelors	3	564.33	
	Total	992		

Table 113

Mann-Whitney U Test, Agreement and Highest Degree Earned

<i>Item, Students with Special Needs...</i>	<i>Level(s) Taught</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig. (2-tailed)</i>				
are more expressive than "regular" students	Bachelors	373	458.30	170946.50	87169.50	214934.50	-2.16	.031				
	Masters	505	425.61	214934.50								
	Total	878										
	Bachelors	373	224.18	83619.50					8138.50	9908.50	-3.64	.000
	Ph.D./D.M.A.	59	167.94	9908.50								
	Total	432										
	Masters	505	288.28	145582.00					11978.00	13748.00	-2.80	.005
	Ph.D./D.M.A.	59	233.02	13748.00								
	Total	564										
	Ed.S.	46	61.73	2839.50					955.50	2725.50	-2.90	.004
	Ph.D./D.M.A.	59	46.19	2725.50								
	Total	105										

Grade levels taught. Kruskal-Wallis and post-hoc Chi-Square tests show significant differences when comparing agreement and grade levels taught (see Table 114). Mann-Whitney tests indicated significant differences among participant ratings of their level of agreement when compared by grade level(s) taught. Table 115 and Table 116 show the specific differences, though the groups are quite uneven, and so these results should be taken with caution.

Table 114

Kruskal-Wallis Ranks and Chi-Square, Agreement by Grade Levels Taught

<i>Students with Special Needs...</i>	<i>Grade Levels</i>	<i>N</i>	<i>Mean Rank</i>	<i>Chi-Square</i>	<i>df</i>	<i>Asymp. Sig.</i>
participate well in music	PreK	1	906.50	20.979	9	.013
	Elem	281	487.88			
	MS	248	487.32			
	HS	193	556.63			
	Collegiate	15	486.77			
	Other	4	627.75			
	Elem MS	39	468.45			
	Elem HS	9	578.61			
	MS HS	133	451.08			
	Elem, MS, HS	68	470.07			
	Total	991				
are accepted by their peers	PreK	1	601.00	34.010	9	.000
	Elem	281	479.36			
	MS	248	483.10			
	HS	193	581.83			
	Collegiate	15	455.97			
	Other	4	583.88			
	Elem MS	39	432.87			
	Elem HS	9	557.22			
	MS HS	133	490.81			
	Elem, MS, HS	68	408.54			
	Total	991				
are disruptive in music classes	PreK	1	588.50	58.687	9	.000
	Elem	281	565.15			
	MS	248	484.81			
	HS	193	403.91			
	Collegiate	15	442.13			
	Other	4	167.38			
	Elem MS	39	614.72			
	Elem HS	9	421.83			
	MS HS	133	474.52			
	Elem, MS, HS	68	526.02			
	Total	991				
never require modifications	PreK	1	477.00	20.145	9	.017
	Elem	281	456.03			
	MS	248	507.61			
	HS	193	493.07			
	Collegiate	15	603.03			
	Other	4	202.88			
	Elem MS	39	545.37			
	Elem HS	9	437.39			
	MS HS	133	535.80			
	Elem, MS, HS	68	522.65			
	Total	991				

(continues)

<i>Students with Special Needs...</i>	<i>Grade Levels</i>	<i>N</i>	<i>Mean Rank</i>	<i>Chi-Square</i>	<i>df</i>	<i>Asymp. Sig.</i>
are difficult to teach	PreK	1	282.50	22.005	9	.009
	Elem	281	491.27			
	MS	248	523.77			
	HS	193	454.85			
	Collegiate	15	566.23			
	Other	4	223.75			
	Elem MS	39	487.69			
	Elem HS	9	412.56			
	MS HS	133	478.25			
	Elem, MS, HS	68	585.26			
Total	991					
do not belong in music classes	PreK	1	324.50	30.463	9	.000
	Elem	281	452.64			
	MS	248	524.09			
	HS	193	489.81			
	Collegiate	15	550.70			
	Other	4	324.50			
	Elem MS	39	449.40			
	Elem HS	9	324.50			
	MS HS	133	545.93			
	Elem, MS, HS	68	542.61			
Total	991					
should always be in music class(es)	PreK	1	863.50	82.939	9	.000
	Elem	281	601.33			
	MS	248	438.51			
	HS	193	442.55			
	Collegiate	15	392.97			
	Other	4	322.75			
	Elem MS	39	609.45			
	Elem HS	9	708.78			
	MS HS	133	434.67			
	Elem, MS, HS	68	476.35			
Total	991					
do not participate well in music	PreK	1	468.50	27.297	9	.001
	Elem	281	524.36			
	MS	248	511.27			
	HS	193	428.94			
	Collegiate	15	521.70			
	Other	4	379.25			
	Elem MS	39	551.09			
	Elem HS	9	263.50			
	MS HS	133	499.98			
	Elem, MS, HS	68	506.43			
Total	991					

(continues)

<i>Students with Special Needs...</i>	<i>Grade Levels</i>	<i>N</i>	<i>Mean Rank</i>	<i>Chi-Square</i>	<i>df</i>	<i>Asymp. Sig.</i>
are not disruptive in music classes	PreK	1	511.00	25.428	9	.003
	Elem	281	463.99			
	MS	248	486.07			
	HS	193	567.47			
	Collegiate	15	482.23			
	Other	4	772.38			
	Elem MS	39	434.28			
	Elem HS	9	547.83			
	MS HS	133	490.34			
	Elem, MS, HS	68	487.84			
Total	991					
are not accepted by their peers	PreK	1	391.00	25.372	9	.003
	Elem	281	508.57			
	MS	248	485.52			
	HS	193	434.83			
	Collegiate	15	513.60			
	Other	4	492.63			
	Elem MS	39	548.88			
	Elem HS	9	353.72			
	MS HS	133	532.05			
	Elem, MS, HS	68	571.76			
Total	991					
are not difficult to teach	PreK	1	834.00	24.360	9	.004
	Elem	281	482.15			
	MS	248	474.34			
	HS	193	553.78			
	Collegiate	15	487.03			
	Other	4	834.00			
	Elem MS	39	470.72			
	Elem HS	9	602.06			
	MS HS	133	500.44			
	Elem, MS, HS	68	437.15			
Total	991					

Table 115

Mann Whitney U, Agreement by Grade Levels Taught

<i>Item, Students with Special Needs...</i>	<i>Level(s) Taught</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>
participate well in music	Elem	281	224.09	62969.00
	HS	193	257.03	49606.00
	Total	474		
	MS	248	207.57	51476.50
	HS	193	238.26	45984.50
	Total	441		
	HS	193	120.11	23181.00
	Elem MS	39	98.64	3847.00
	Total	232		
	HS	193	177.80	34316.00
	MS HS	133	142.74	18985.00
	Total	326		
	HS	193	136.86	26414.50
	Elem MS HS	68	114.36	7776.50
	Total	261		
are accepted by their peers	Elem	281	216.99	60975.50
	HS	193	267.35	51599.50
	Total	474		
	Elem	281	180.11	50611.00
	Elem MS HS	68	153.88	10464.00
	Total	349		
	MS	248	201.80	50046.00
	HS	193	245.67	47415.00
	Total	441		
	MS	248	163.64	40582.00
	Elem MS HS	68	139.76	9504.00
	Total	316		
	HS	193	122.03	23552.50
	Elem MS	39	89.12	3475.50
	Total	232		
	HS	193	175.36	33844.50
	MS HS	133	146.29	19456.50
	Total	326		
	HS	193	142.67	27536.00
	Elem MS HS	68	97.87	6655.00
	Total	261		
MS HS	133	106.44	14156.00	
Elem MS HS	68	90.37	6145.00	
Total	201			

(continues)

<i>Item, Students with Special Needs...</i>	<i>Level(s) Taught</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>
are disruptive in music classes	Elem	281	285.66	80271.50
	MS	248	241.59	59913.50
	Total	529		
	Elem	281	268.22	75370.50
	HS	193	192.77	37204.50
	Total	474		
	Elem	281	144.52	40610.00
	Other	4	36.25	145.00
	Total	285		
	Elem	281	219.42	61657.50
	MS HS	133	182.31	24247.50
	Total	414		
	MS	248	237.42	58880.00
	HS	193	199.90	38581.00
	Total	441		
	MS	248	127.83	31702.50
	Other	4	43.88	175.50
	Total	252		
	MS	248	138.74	34407.00
	Elem MS	39	177.46	6921.00
	Total	287		
	HS	193	108.38	20916.50
	Elem MS	39	156.71	6111.50
	Total	232		
	HS	193	154.18	29757.50
	MS HS	133	177.02	23543.50
	Total	326		
HS	193	122.18	23581.00	
Elem MS HS	68	156.03	10610.00	
Total	261			
Collegiate	15	21.10	316.50	
Elem MS	39	29.96	1168.50	
Total	54			
Other	4	5.63	22.50	
Elem MS	39	23.68	923.50	
Total	43			
Other	4	27.88	111.50	
MS HS	133	70.24	9341.50	
Total	137			
Other	4	10.50	42.00	
Elem MS HS	68	38.03	2586.00	
Total	72			

(continues)

<i>Item, Students with Special Needs...</i>	<i>Level(s) Taught</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>
are disruptive in music classes	Elem MS	39	26.41	1030.00
	Elem HS	9	16.22	146.00
	Total	48		
	Elem MS	39	104.97	4094.00
	MS HS	133	81.08	10784.00
	Total	172		
	Elem MS	39	60.73	2368.50
	Elem MS HS	68	50.14	3409.50
	Total	107		
always require modifications	Elem	281	247.30	69491.00
	HS	193	223.23	43084.00
	Total	474		
	MS	248	232.59	57683.50
	HS	193	206.10	39777.50
	Total	441		
never require modifications	Elem	281	251.95	70797.50
	MS	248	279.79	69387.50
	Total	529		
	Elem	281	146.31	41113.00
	Collegiate	15	189.53	2843.00
	Total	296		
	Elem	281	144.05	40479.00
	Other	4	69.00	276.00
	Total	285		
	Elem	281	156.90	44088.50
	Elem MS	39	186.45	7271.50
	Total	320		
	Elem	281	196.71	55276.00
	MS HS	133	230.29	30629.00
	Total	414		
	MS	248	127.73	31678.00
	Other	4	50.00	200.00
	Total	252		
	HS	193	100.12	19324.00
	Other	4	44.75	179.00
	Total	197		
	Collegiate	15	11.47	172.00
	Other	4	4.50	18.00
	Total	19		
	Other	4	8.38	33.50
	Elem MS	39	23.40	912.50
	Total	43		

(continues)

<i>Item, Students with Special Needs...</i>	<i>Level(s) Taught</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>
never require modifications	Other	4	24.63	98.50
	MS HS	133	70.33	9354.50
	Total	137		
	Other	4	14.50	58.00
	Elem MS HS	68	37.79	2570.00
	Total	72		
are difficult to teach	Elem	281	144.08	40487.50
	Other	4	66.88	267.50
	Total	285		
	Elem	281	168.54	47358.50
	Elem MS HS	68	201.71	13716.50
	Total	349		
	MS	248	234.55	58168.50
	HS	193	203.59	39292.50
	Total	441		
	MS	248	127.73	31677.50
	Other	4	50.13	200.50
	Total	252		
	HS	193	122.13	23570.50
	Elem MS HS	68	156.18	10620.50
	Total	261		
	Collegiate	15	11.33	170.00
	Other	4	5.00	20.00
	Total	19		
	Other	4	12.00	48.00
	Elem MS HS	68	37.94	2580.00
	Total	72		
	MS HS	133	93.84	12481.00
	Elem MS HS	68	115.00	7820.00
	Total	201		
do not belong in music classes	Elem	281	246.95	69393.00
	MS	248	285.45	70792.00
	Total	529		
	Elem	281	195.14	54834.00
	MS HS	133	233.62	31071.00
	Total	414		
	Elem	281	168.93	47469.00
	Elem MS HS	68	200.09	13606.00
	Total	349		
	MS	248	130.83	32446.50
	Elem HS	9	78.50	706.50
	Total	257		

(continues)

<i>Item, Students with Special Needs...</i>	<i>Level(s) Taught</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>
do not belong in music classes	HS	193	103.04	19886.50
	Elem HS	9	68.50	616.50
	Total	202		
	HS	193	155.88	30084.50
	MS HS	133	174.56	23216.50
	Total	326		
	Elem MS	39	73.65	2872.50
	MS HS	133	90.27	12005.50
	Total	172		
	Elem HS	9	42.50	382.50
	MS HS	133	73.46	9770.50
	Total	142		
	Elem HS	9	24.50	220.50
	Elem MS HS	68	40.92	2782.50
Total	77			
should always be in music class(es)	Elem	281	305.17	85751.50
	MS	248	219.49	54433.50
	Total	529		
	Elem	281	268.30	75391.50
	HS	193	192.66	37183.50
	Total	474		
	Elem	281	151.57	42592.50
	Collegiate	15	90.90	1363.50
	Total	296		
	Elem	281	144.14	40502.50
	Other	4	63.13	252.50
	Total	285		
	Elem	281	230.20	64685.50
	MS HS	133	159.55	21219.50
	Total	414		
	Elem	281	183.57	51584.00
	Elem MS HS	68	139.57	9491.00
	Total	349		
	MS	248	137.20	34024.50
	Elem MS	39	187.27	7303.50
	Total	287		
	MS	248	126.50	31372.50
	Elem HS	9	197.83	1780.50
	Total	257		
	HS	193	109.78	21187.00
	Elem MS	39	149.77	5841.00
	Total	232		

(continues)

<i>Item, Students with Special Needs...</i>	<i>Level(s) Taught</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>
should always be in music class(es)	HS	193	99.01	19108.00
	Elem HS	9	155.00	1395.00
	Total	202		
	Collegiate	15	18.93	284.00
	Elem MS	39	30.79	1201.00
	Total	54		
	Collegiate	15	9.60	144.00
	Elem HS	9	17.33	156.00
	Total	24		
	Other	4	10.00	40.00
	Elem MS	39	23.23	906.00
	Total	43		
	Other	4	3.13	12.50
	Elem HS	9	8.72	78.50
	Total	13		
	Elem MS	39	110.94	4326.50
	MS HS	133	79.33	10551.50
	Total	172		
	Elem MS	39	63.12	2461.50
Elem MS HS	68	48.77	3316.50	
Total	107			
Elem HS	9	110.56	995.00	
MS HS	133	68.86	9158.00	
Total	142			
Elem HS	9	54.94	494.50	
Elem MS HS	68	36.89	2508.50	
Total	77			
are more expressive than "regular" students	Elem	281	250.19	70302.00
	HS	193	219.03	42273.00
	Total	474		
	Elem	281	214.72	60337.50
MS HS	133	192.24	25567.50	
Total	414			
do not fit in with other students	Elem	281	250.78	70470.50
	HS	193	218.16	42104.50
	Total	474		
	HS	193	155.48	30008.50
	MS HS	133	175.13	23292.50
	Total	326		
	HS	193	125.33	24188.50
	Elem MS HS	68	147.10	10002.50
Total	261			

(continues)

<i>Item, Students with Special Needs...</i>	<i>Level(s) Taught</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>
do not participate well in music	Elem	281	255.82	71884.50
	HS	193	210.83	40690.50
	Total	474		
	Elem	281	147.80	41530.50
	Elem HS	9	73.83	664.50
	Total	290		
	MS	248	236.90	58751.50
	HS	193	200.57	38709.50
	Total	441		
	MS	248	131.21	32540.50
	Elem HS	9	68.06	612.50
	Total	257		
	HS	193	111.53	21524.50
	Elem MS	39	141.12	5503.50
	Total	232		
	HS	193	103.10	19898.50
	Elem HS	9	67.17	604.50
	Total	202		
	HS	193	153.40	29606.00
	MS HS	133	178.16	23695.00
	Total	326		
	HS	193	125.71	24262.50
	Elem MS HS	68	146.01	9928.50
	Total	261		
	Collegiate	15	14.77	221.50
	Elem HS	9	8.72	78.50
	Total	24		
Elem MS	39	27.15	1059.00	
Elem HS	9	13.00	117.00	
Total	48			
Elem HS	9	38.17	343.50	
MS HS	133	73.76	9809.50	
Total	142			
Elem HS	9	22.67	204.00	
Elem MS HS	68	41.16	2799.00	
Total	77			
are not disruptive in music classes	Elem	281	141.76	39835.00
	Other	4	230.00	920.00
	Total	285		
	MS	248	205.02	50844.00
	HS	193	241.54	46617.00
Total	441			

(continues)

<i>Item, Students with Special Needs...</i>	<i>Level(s) Taught</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>
are not disruptive in music classes	MS	248	125.32	31079.50
	Other	4	199.63	798.50
	Total	252		
	HS	193	121.83	23513.00
	Elem MS	39	90.13	3515.00
	Total	232		
	HS	193	173.91	33564.50
	MS HS	133	148.39	19736.50
	Total	326		
	HS	193	136.38	26321.00
	Elem MS HS	68	115.74	7870.00
	Total	261		
	are less expressive than "regular" students	Other	4	36.13
Elem MS		39	20.55	801.50
Total		43		
Other		4	107.25	429.00
MS HS		133	67.85	9024.00
Total		137		
Elem		281	246.88	69373.50
HS		193	223.84	43201.50
Total		474		
MS		248	231.11	57315.00
HS		193	208.01	40146.00
Total		441		
are not accepted by their peers		HS	193	125.41
	Elem MS HS	68	146.88	9987.50
	Total	261		
	Elem	281	251.82	70760.50
	HS	193	216.66	41814.50
	Total	474		
	MS	248	231.31	57365.00
	HS	193	207.75	40096.00
	Total	441		
	MS	248	152.38	37790.00
	Elem MS HS	68	180.82	12296.00
	Total	316		
	HS	193	112.12	21639.00
Elem MS	39	138.18	5389.00	
Total	232			
HS	193	150.86	29116.00	
MS HS	133	181.84	24185.00	
Total	326			

(continues)

<i>Item, Students with Special Needs...</i>	<i>Level(s) Taught</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>
are not accepted by their peers	HS	193	121.69	23487.00
	Elem MS HS	68	157.41	10704.00
	Total	261		
	Elem HS	9	47.56	428.00
	MS HS	133	73.12	9725.00
	Total	142		
	Elem HS	9	23.00	207.00
	Elem MS HS	68	41.12	2796.00
	Total	77		
	are not difficult to teach	Elem	281	223.74
HS		193	257.53	49703.00
Total		474		
Elem		281	141.60	39789.00
Other		4	241.50	966.00
Total		285		
MS		248	205.57	50982.00
HS		193	240.82	46479.00
Total		441		
MS		248	125.02	31004.00
Other		4	218.50	874.00
Total		252		
HS		193	138.81	26790.50
Elem MS HS		68	108.83	7400.50
Total		261		
Collegiate		15	8.53	128.00
Other		4	15.50	62.00
Total		19		
Other		4	38.00	152.00
Elem MS		39	20.36	794.00
Total		43		
Other		4	115.00	460.00
MS HS		133	67.62	8993.00
Total		137		
Other		4	64.00	256.00
Elem MS HS		68	34.88	2372.00
Total		72		

Table 116

Mann Whitney U Statistics, Agreement Levels and Grades Taught

<i>Item, Students with Special Needs...</i>	<i>Level(s) Taught</i>	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig. (2-tailed)</i>	<i>Exact Sig. *</i>
participate well in music	Elem	23348.00	62969.00	-2.90	.004	
	HS					
	Total					
	MS	20600.50	51476.50	-2.81	.005	
	HS					
	Total					
	HS	3067.00	3847.00	-2.08	.038	
	Elem MS					
	Total					
	HS	10074.00	18985.00	-3.70	.000	
	MS HS					
	Total					
are accepted by their peers	HS	5430.50	7776.50	-2.35	.019	
	Elem MS HS					
	Total					
	Elem	21354.50	60975.50	-4.36	.000	
	HS					
	Total					
	Elem	8118.00	10464.00	-2.12	.034	
	Elem MS HS					
	Total					
	MS	19170.00	50046.00	-3.94	.000	
	HS					
	Total					
MS	7158.00	9504.00	-2.08	.037		
Elem MS HS						
Total						
HS	2695.50	3475.50	-3.06	.002		
Elem MS						
Total						
HS	10545.50	19456.50	-3.01	.003		
MS HS						
Total						
HS	4309.00	6655.00	-4.61	.000		
Elem MS HS						
Total						
MS HS	3799.00	6145.00	-2.01	.045		
Elem MS HS						
Total						

Note. *2(1-tailed Sig.) b. Not corrected for ties.

(continues)

<i>Item, Students with Special Needs...</i>	<i>Level(s) Taught</i>	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig. (2-tailed)</i>	<i>Exact Sig.*</i>
are disruptive in music classes	Elem MS Total	29037.50	59913.50	-3.54	.000	
	Elem HS Total	18483.50	37204.50	-6.24	.000	
	Elem Other Total	135.00	145.00	-2.77	.006	
	Elem MS HS Total	15336.50	24247.50	-3.12	.002	
	MS HS Total	19860.00	38581.00	-3.30	.001	
	MS Other Total	165.50	175.50	-2.48	.013	
	MS Elem MS Total	3531.00	34407.00	-2.94	.003	
	HS Elem MS Total	2195.50	20916.50	-4.37	.000	
	HS MS HS Total	11036.50	29757.50	-2.29	.022	
	HS Elem MS HS Total	4860.00	23581.00	-3.42	.001	
	Collegiate Elem MS Total	196.50	316.50	-2.00	.045	
	Other Elem MS Total	12.50	22.50	-2.92	.003	.003 ^b
	Other MS HS Total	101.50	111.50	-2.23	.026	
	Other Elem MS HS Total	32.00	42.00	-2.80	.005	.007 ^b

Note. *2(1-tailed Sig.) b. Not corrected for ties.

(continues)

<i>Item, Students with Special Needs...</i>	<i>Level(s) Taught</i>	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig. (2-tailed)</i>	<i>Exact Sig.*</i>
are disruptive in music classes	Elem MS	101.00	146.00	-2.15	.032	.049 ^b
	Elem HS					
	Total					
	Elem MS	1873.00	10784.00	-2.79	.005	
	MS HS					
	Total					
always require modifications	Elem MS	1063.50	3409.50	-1.87	.062	
	Elem MS HS					
	Total					
	Elem	24363.00	43084.00	-2.01	.045	
	HS					
	Total					
never require modifications	MS	21056.50	39777.50	-2.32	.020	
	HS					
	Total					
	Elem	31176.50	70797.50	-2.29	.022	
	MS					
	Total					
	Elem	1492.00	41113.00	-2.08	.037	
	Collegiate					
	Total					
	Elem	266.00	276.00	-1.98	.047	
	Other					
	Total					
	Elem	4467.50	44088.50	-2.05	.040	
	Elem MS					
	Total					
	Elem	15655.00	55276.00	-2.93	.003	
	MS HS					
	Total					
MS	190.00	200.00	-2.32	.020		
Other						
Total						
HS	169.00	179.00	-2.06	.040		
Other						
Total						
Collegiate	8.00	18.00	-2.34	.019	.027 ^b	
Other						
Total						
Other	23.50	33.50	-2.52	.012	.018 ^b	
Elem MS						
Total						

Note. *2(1-tailed Sig.) b. Not corrected for ties.

(continues)

<i>Item, Students with Special Needs...</i>	<i>Level(s) Taught</i>	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig. (2-tailed)</i>	<i>Exact Sig. *</i>
never require modifications	Other MS HS Total	88.50	98.50	-2.50	.012	
	Other Elem MS HS Total	48.00	58.00	-2.37	.018	.028 ^b
	are difficult to teach					
are difficult to teach	Elem Other Total	257.50	267.50	-1.98	.047	
	Elem Elem MS HS Total	7737.50	47358.50	-2.59	.009	
	MS HS Total	20571.50	39292.50	-2.70	.007	
	MS Other Total	190.50	200.50	-2.27	.023	
	HS Elem MS HS Total	4849.50	23570.50	-3.40	.001	
	Collegiate Other Total	10.00	20.00	-2.14	.032	.049 ^b
	Other Elem MS HS Total	38.00	48.00	-2.61	.009	.012 ^b
	MS HS Elem MS HS Total	3570.00	12481.00	-2.59	.010	
	do not belong in music classes					
	Elem MS Total	29772.00	69393.00	-3.50	.000	
	Elem MS HS Total	15213.00	54834.00	-3.74	.000	
	Elem Elem MS HS Total	7848.00	47469.00	-2.87	.004	
	MS Elem HS Total	661.50	706.50	-2.40	.016	

Note. *2(1-tailed Sig.) b. Not corrected for ties.

(continues)

<i>Item, Students with Special Needs...</i>	<i>Level(s) Taught</i>	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig. (2-tailed)</i>	<i>Exact Sig.*</i>
do not belong in music classes	HS	571.50	616.50	-2.11	.035	
	Elem HS					
	Total					
	HS	11363.50	30084.50	-2.05	.040	
	MS HS					
	Total					
	Elem MS	2092.50	2872.50	-2.11	.035	
	MS HS					
	Total					
	Elem HS	337.50	382.50	-2.49	.013	
	MS HS					
	Total					
should always be in music class(es)	Elem HS	175.50	220.50	-2.40	.016	
	Elem MS HS					
	Total					
	Elem	23557.50	54433.50	-6.67	.000	
	MS					
	Total					
	Elem	18462.50	37183.50	-6.14	.000	
	HS					
	Total					
	Elem	1243.50	1363.50	-2.82	.005	
	Collegiate					
	Total					
	Elem	242.50	252.50	-2.06	.039	
	Other					
	Total					
	Elem	12308.50	21219.50	-5.85	.000	
	MS HS					
	Total					
Elem	7145.00	9491.00	-3.39	.001		
Elem MS HS						
Total						
MS	3148.50	34024.50	-3.62	.000		
Elem MS						
Total						
MS	496.50	31372.50	-2.93	.003		
Elem HS						
Total						
HS	2466.00	21187.00	-3.52	.000		
Elem MS						
Total						

Note. *2(1-tailed Sig.) b. Not corrected for ties.

(continues)

<i>Item, Students with Special Needs...</i>	<i>Level(s) Taught</i>	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig. (2-tailed)</i>	<i>Exact Sig.*</i>	
should always be in music class(es)	HS	387.00	19108.00	-2.91	.004		
	Elem HS						
	Total						
	Collegiate	164.00	284.00	-2.59	.010		
	Elem MS						
	Total						
	Collegiate	24.00	144.00	-2.70	.007	.008 ^b	
	Elem HS						
	Total						
	Other	30.00	40.00	-2.11	.035	.044 ^b	
	Elem MS						
	Total						
	Other	2.50	12.50	-2.56	.011	.011 ^b	
	Elem HS						
	Total						
are more expressive than "regular" students	Elem MS	1640.50	10551.50	-3.62	.000		
	MS HS						
	Total						
	Elem MS	970.50	3316.50	-2.39	.017		
	Elem MS HS						
	Total						
	Elem HS	247.00	9158.00	-3.06	.002		
	MS HS						
	Total						
	Elem HS	162.50	2508.50	-2.37	.018		
	Elem MS HS						
	Total						
	do not fit in with other students	Elem HS	23383.50	42104.50	-2.81	.005	
		HS					
		Total					
HS		11287.50	30008.50	-2.03	.042		
MS HS							
Total							
do not fit in with other students	HS	5467.50	24188.50	-2.22	.026		
	Elem MS HS						
	Total						

Note. *2(1-tailed Sig.) b. Not corrected for ties.

(continues)

<i>Item, Students with Special Needs...</i>	<i>Level(s) Taught</i>	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig. (2-tailed)</i>	<i>Exact Sig.*</i>	
do not participate well in music	Elem HS Total	21969.50	40690.50	-3.88	.000		
	Elem Elem HS Total	619.50	664.50	-2.83	.005		
	MS HS Total	19988.50	38709.50	-3.30	.001		
	MS Elem HS Total	567.50	612.50	-2.74	.006		
	HS Elem MS Total	2803.50	21524.50	-2.85	.004		
	HS Elem HS Total	559.50	604.50	-2.04	.041		
	HS MS HS Total	10885.00	29606.00	-2.66	.008		
	HS Elem MS HS Total	5541.50	24262.50	-2.13	.033		
	Collegiate Elem HS Total	33.50	78.50	-2.19	.029	.041 ^b	
	Elem MS Elem HS Total	72.00	117.00	-3.05	.002	.005 ^b	
	Elem HS MS HS Total	298.50	343.50	-2.86	.004		
	Elem HS Elem MS HS Total	159.00	204.00	-2.53	.011		
	are not disruptive in music classes	Elem Other Total	214.00	39835.00	-2.30	.022	
		MS HS Total	19968.00	50844.00	-3.21	.001	

Note. *2(1-tailed Sig.) b. Not corrected for ties.

(continues)

<i>Item, Students with Special Needs...</i>	<i>Level(s) Taught</i>	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig. (2-tailed)</i>	<i>Exact Sig.*</i>
are not disruptive in music classes	MS	203.50	31079.50	-2.22	.027	
	Other					
	Total					
	HS	2735.00	3515.00	-2.87	.004	
	Elem MS					
	Total					
	HS	10825.50	19736.50	-2.56	.010	
	MS HS					
	Total					
	HS	5524.00	7870.00	-2.06	.040	
Elem MS HS						
Total						
are less expressive than "regular" students	Other	21.50	801.50	-2.64	.008	.014 ^b
	Elem MS					
	Total					
	Other	113.00	9024.00	-2.12	.034	
	MS HS					
	Total					
	Elem	24480.50	43201.50	-1.97	.049	
	HS					
	Total					
	MS	21425.00	40146.00	-2.07	.038	
HS						
Total						
are not accepted by their peers	HS	5482.50	24203.50	-2.21	.027	
	Elem MS HS					
	Total					
	Elem	23093.50	41814.50	-3.08	.002	
	HS					
	Total					
	MS	21375.00	40096.00	-2.20	.028	
	HS					
	Total					
	MS	6914.00	37790.00	-2.57	.010	
Elem MS HS						
Total						
HS	2918.00	21639.00	-2.49	.013		
Elem MS						
Total						
HS	10395.00	29116.00	-3.23	.001		
MS HS						
Total						

Note. *2(1-tailed Sig.) b. Not corrected for ties.

(continues)

<i>Item, Students with Special Needs...</i>	<i>Level(s) Taught</i>	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig. (2-tailed)</i>	<i>Exact Sig.*</i>
are not accepted by their peers	HS	4766.00	23487.00	-3.74	.000	
	Elem MS HS					
	Total					
	Elem HS	383.00	428.00	-1.98	.048	
	MS HS					
	Total					
	Elem HS	162.00	207.00	-2.53	.011	
	Elem MS HS					
	Total					
are not difficult to teach	Elem HS	23251.00	62872.00	-2.79	.005	
	Total					
	Elem	168.00	39789.00	-2.56	.011	
	Other					
	Total					
	MS HS	20106.00	50982.00	-3.06	.002	
	Total					
	MS	128.00	31004.00	-2.74	.006	
	Other					
	Total					
	HS	5054.50	7400.50	-2.97	.003	
	Elem MS HS					
	Total					
	Collegiate	8.00	128.00	-2.37	.018	.027 ^b
	Other					
	Total					
	Other	14.00	794.00	-2.98	.003	.004 ^b
	Elem MS					
	Total					
	Other	82.00	8993.00	-2.54	.011	
	MS HS					
	Total					
	Other	26.00	2372.00	-2.92	.004	.003 ^b
	Elem MS HS					
	Total					

Note. *2(1-tailed Sig.) b. Not corrected for ties.

Coursework information. Mann-Whitney U tests indicated significant differences when comparing music educators' agreement level with whether they had coursework. Table 117 and Table 118 show that those who had coursework generally agreed with positive statements and disagreed with negative statements about special needs students than those without coursework.

Table 117

Mann Whitney U Ranks, Agreement and Coursework

<i>Item, Students with Special Need...</i>	<i>Had Coursework</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>
participate well in music	Yes	641	518.97	332659.50
	No	351	455.47	159868.50
	Total	992		
are accepted by their peers	Yes	641	514.34	329694.50
	No	351	463.91	162833.50
	Total	992		
do not belong in music classes	Yes	641	475.69	304918.50
	No	351	534.50	187609.50
	Total	992		
do not fit in with other students	Yes	641	484.18	310362.00
	No	351	518.99	182166.00
	Total	992		
do not participate well in music	Yes	641	477.21	305893.00
	No	351	531.72	186635.00
	Total	992		
are not accepted by their peers	Yes	641	483.74	310077.50
	No	351	519.80	182450.50
	Total	992		

Table 118

Mann Whitney U Statistics, Agreement and Coursework

<i>Had Coursework</i>	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig. (2-tailed)</i>
participate well in music	98092.50	159868.50	-3.71	.000
are accepted by their peers	101057.50	162833.50	-2.90	.004
do not belong in music classes	99157.50	304918.50	-3.69	.000
do not fit in with other students	104601.00	310362.00	-2.01	.044
do not participate well in music	100132.00	305893.00	-3.17	.002
are not accepted by their peers	104316.50	310077.50	-2.12	.034

Coursework had music content. Mann-Whitney U tests indicated significant differences when comparing music educators' agreement level with whether they had coursework with music-specific content. Table 119 shows frequencies and mean ranks. Table 120 shows Mann-Whitney U statistics.

Table 119

Mann Whitney U Ranks, Agreement and Coursework with Music-Specific Content

<i>Students with special needs...</i>	<i>Music Specific</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>
participate well in music	Yes	305	340.04	103712.00
	No	336	303.72	102049.00
	Total	641		
are accepted by their peers	Yes	305	338.21	103154.00
	No	336	305.38	102607.00
	Total	641		
are disruptive in music classes	Yes	305	297.64	90779.50
	No	336	342.21	114981.50
	Total	641		
should always be in music class(es)	Yes	305	343.64	104811.00
	No	336	300.45	100950.00
	Total	641		
are not disruptive in music classes	Yes	305	338.78	103328.00
	No	336	304.86	102433.00
	Total	641		
are not difficult to teach	Yes	305	338.11	103123.50
	No	336	305.47	102637.50
	Total	641		

Table 120

Mann Whitney U Statistics, Agreement and Coursework with Music-Specific Content

<i>Item vs. Coursework Had Music Content</i>	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig. (2-tailed)</i>
participate well in music	45433.00	102049.00	-2.79	.005
are accepted by their peers	45991.00	102607.00	-2.46	.014
are disruptive in music classes	44114.50	90779.50	-3.24	.001
should always be in music class(es)	44334.00	100950.00	-3.06	.002
are not disruptive in music classes	45817.00	102433.00	-2.50	.012
are not difficult to teach	46021.50	102637.50	-2.37	.018

Coursework had fieldwork. Mann-Whitney U tests indicated significant differences when comparing music educators' agreement level with whether they had coursework with fieldwork. Table 121 and Table 122 show that those who had fieldwork generally agreed more with positive statements and disagreed more with negative statements about special needs students, than participants who indicated they did not have fieldwork.

Table 121

Mann-Whitney U Test Ranks, Coursework with Fieldwork

<i>Students with Special Needs...</i>	<i>Coursework with Fieldwork</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>
never require modifications	Yes	190	348.06	66131.50
	No	451	309.60	139629.50
	Total	641		
do not belong in music classes	Yes	190	299.69	56941.00
	No	451	329.98	148820.00
	Total	641		
should always be in music class(es)	Yes	190	355.84	67609.50
	No	451	306.32	138151.50
	Total	641		
do not participate well in music	Yes	190	300.59	57112.50
	No	451	329.60	148648.50
	Total	641		

Table 122

Mann-Whitney U Test Statistics, Coursework with Fieldwork

<i>Item vs. Coursework Had Music Content</i>	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig. (2-tailed)</i>
never require modifications	37703.50	139629.50	-2.63	.009
do not belong in music classes	38796.00	56941.00	-2.34	.019
should always be in music class(es)	36225.50	138151.50	-3.20	.001
do not participate well in music	38967.50	57112.50	-2.00	.045

Attended professional development. Mann-Whitney U tests showed significant differences for music educators' agreement level when compared to whether they attended professional development. Table 123 and Table 124 show that those who attended professional

development agreed more with positive statements and disagreed more with negative statements about special needs students than those who did not attend professional development.

Table 123

Mann Whitney U Ranks, Agreement and Professional Development

<i>Students with Special Needs...</i>	<i>Had Professional Development</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>
participate well in music	Yes	648	512.60	332165.00
	No	344	466.17	160363.00
	Total	992		
are accepted by their peers	Yes	648	519.94	336919.50
	No	344	452.35	155608.50
	Total	992		
do not belong in music classes	Yes	648	481.94	312297.00
	No	344	523.93	180231.00
	Total	992		
should always be in music class(es)	Yes	648	511.77	331626.50
	No	344	467.74	160901.50
	Total	992		
do not fit in with other students	Yes	648	479.14	310485.00
	No	344	529.19	182043.00
	Total	992		
do not participate well in music	Yes	648	480.90	311621.00
	No	344	525.89	180907.00
	Total	992		
are not accepted by their peers	Yes	648	480.09	311097.50
	No	344	527.41	181430.50
	Total	992		
are not difficult to teach	Yes	648	511.12	331205.00
	No	344	468.96	161323.00
	Total	992		

Table 124

Mann Whitney U Statistics, Agreement and Professional Development

<i>Item vs. Attended Professional Development</i>	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig. (2-tailed)</i>
participate well in music	101023.00	160363.00	-2.70	.007
are accepted by their peers	96268.50	155608.50	-3.87	.000
do not belong in music classes	102021.00	312297.00	-2.62	.009
should always be in music class(es)	101561.50	160901.50	-2.39	.017
do not fit in with other students	100209.00	310485.00	-2.88	.004
do not participate well in music	101345.00	311621.00	-2.60	.009
are not accepted by their peers	100821.50	311097.50	-2.77	.006
are not difficult to teach	101983.00	161323.00	-2.35	.019

Completed personal reading and research. Mann-Whitney U tests showed significant differences for music educators' agreement level when compared to whether they completed personal reading and research about students with special needs. Table 125 and Table 126 show participants who did their own research agreed with positive statements and disagreed with negative statements than those who did not do their own research. They also disagreed more than special needs students never require modification.

Table 125

Mann-Whitney U Ranks, Agreement and Personal Reading and Research

<i>Students with Special Needs...</i>	<i>Did Personal Research</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>
participate well in music	Yes	675	520.44	351298.50
	No	317	445.52	141229.50
	Total	992		
never require modifications	Yes	675	482.26	325524.50
	No	317	526.82	167003.50
	Total	992		
are difficult to teach	Yes	675	483.92	326648.50
	No	317	523.28	165879.50
	Total	992		
do not belong in music classes	Yes	675	466.58	314943.00
	No	317	560.21	177585.00
	Total	992		
should always be in music class(es)	Yes	675	527.88	356321.00
	No	317	429.68	136207.00
	Total	992		
do not fit in with other students	Yes	675	480.41	324274.50
	No	317	530.77	168253.50
	Total	992		
do not participate well in music	Yes	675	481.31	324885.50
	No	317	528.84	167642.50
	Total	992		

Table 126

Mann-Whitney U Test Statistics, Agreement and Personal Reading and Research

<i>Item vs. Personal Research Students with Special Needs...</i>	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig. (2-tailed)</i>
participate well in music	90826.50	141229.50	-4.27	.000
never require modifications	97374.50	325524.50	-2.49	.013
are difficult to teach	98498.50	326648.50	-2.15	.032
do not belong in music classes	86793.00	314943.00	-5.73	.000
should always be in music class(es)	85804.00	136207.00	-5.21	.000
do not fit in with other students	96124.50	324274.50	-2.84	.005
do not participate well in music	96735.50	324885.50	-2.69	.007

Completed personal development in music. Mann-Whitney U tests showed significant differences for music educators' agreement level when compared to whether they attended personal development in music. Table 127 and 128 match previous trends indicating that those who did their research and reading, specifically about teaching music and special needs, agree more with positive statements than those who did not do their own research. Furthermore, those who did their own research disagreed more with negative statements than participants who did not do their own research. They also agreed more that special needs students always require modifications and disagreed more with the opposite statement.

Table 127

Mann-Whitney U Test Ranks, Agreement and Personal Reading and Research in Music

<i>Item Students with Special Needs...</i>	<i>Did Personal Research in Music</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>
participate well in music	Yes	667	517.37	345086.50
	No	325	453.67	147441.50
	Total	992		
are accepted by their peers	Yes	667	509.78	340025.00
	No	325	469.24	152503.00
	Total	992		
always require modifications	Yes	667	512.58	341893.00
	No	325	463.49	150635.00
	Total	992		

(continues)

<i>Item</i>	<i>Did Personal Research in Music</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>
<i>Students with Special Needs...</i> never require modifications	Yes	667	484.11	322904.50
	No	325	521.92	169623.50
	Total	992		
do not belong in music classes	Yes	667	472.13	314911.50
	No	325	546.51	177616.50
	Total	992		
should always be in music class(es)	Yes	667	526.14	350937.50
	No	325	435.66	141590.50
	Total	992		
are more expressive than "regular" students	Yes	667	507.86	338743.00
	No	325	473.18	153785.00
	Total	992		
do not fit in with other students	Yes	667	477.53	318509.50
	No	325	535.44	174018.50
	Total	992		
do not participate well in music	Yes	667	482.49	321824.00
	No	325	525.24	170704.00
	Total	992		

Table 128

Mann-Whitney U Test Statistics, Agreement and Personal Reading and Research in Music

<i>Item vs. Personal Research in Music</i>	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig. (2-tailed)</i>
participate well in music	94466.50	147441.50	-3.65	.000
are accepted by their peers	99528.00	152503.00	-2.29	.022
always require modifications	97660.00	150635.00	-2.71	.007
never require modifications	100126.50	322904.50	-2.13	.033
do not belong in music classes	92133.50	314911.50	-4.58	.000
should always be in music class(es)	88615.50	141590.50	-4.83	.000
are more expressive than "regular" students	100810.00	153785.00	-2.04	.041
do not fit in with other students	95731.50	318509.50	-3.28	.001
do not participate well in music	99046.00	321824.00	-2.44	.015

Class taught with special needs. Data were recoded to indicate whether participants did or did not teach a class with special needs students each day. Mann-Whitney U tests indicated significant differences when comparing music educators' level of agreement and whether they taught one class with students with special needs. Table 129 and Table 130 show similar results as previous items. Those who taught special needs agreed more on positive statements and disagreed more with negative statements than those who did not teach special needs students.

Table 129

Mann-Whitney U Test Ranks, Agreement and Teach at Least One Class

<i>Students With Special Needs...</i>	<i>Taught a Class</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>
participate well in music	Yes	888	507.60	450748.00
	No	104	401.73	41780.00
	Total	992		
are accepted by their peers	Yes	888	509.77	452675.00
	No	104	383.20	39853.00
	Total	992		
never require modifications	Yes	888	490.38	435453.50
	No	104	548.79	57074.50
	Total	992		
do not belong in music classes	Yes	888	480.47	426657.50
	No	104	633.37	65870.50
	Total	992		
should always be in music class(es)	Yes	888	506.45	449729.00
	No	104	411.53	42799.00
	Total	992		
do not fit in with other students	Yes	888	487.37	432785.50
	No	104	574.45	59742.50
	Total	992		
do not participate well in music	Yes	888	487.96	433308.50
	No	104	569.42	59219.50
	Total	992		
are not accepted by their peers	Yes	888	485.66	431270.50
	No	104	589.01	61257.50
	Total	992		

Table 130

Mann Whitney U Test Statistics, Agreement and Teach at Least One Class

<i>Item vs. Taught a Class</i>	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig</i> <i>(2-tailed)</i>
<i>Students with Special Needs...</i>				
participate well in music	36320.00	41780.00	-3.96	.000
are accepted by their peers	34393.00	39853.00	-4.67	.000
never require modifications	40737.50	435453.50	-2.15	.032
do not belong in music classes	31941.50	426657.50	-6.15	.000
should always be in music class(es)	37339.00	42799.00	-3.31	.001
do not fit in with other students	38069.50	432785.50	-3.22	.001
do not participate well in music	38592.50	433308.50	-3.03	.002
are not accepted by their peers	36554.50	431270.50	-3.89	.000

Self-contained class taught. Mann-Whitney U tests indicated significant differences when comparing music educators' level of agreement and whether they taught a self-contained music class. Table 131 and Table 132 show that participants who taught a self-contained music class (versus those who did not) agreed more that special needs students participate well in music, are disruptive in classes, always require modifications, and should always be in music classes. They disagreed more than those who did not teach a self-contained class with special needs students do not belong in music classes and that they were less expressive than "regular" students.

Table 131

Mann-Whitney U Test Ranks, Agreement and Self-Contained Class

<i>Students With Special Needs...</i>	<i>Taught a Self-Contained Class</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>
participate well in music	Yes	126	582.32	73372.50
	No	866	484.01	419155.50
	Total	992		
are disruptive in music classes	Yes	126	558.83	70412.50
	No	866	487.43	422115.50
	Total	992		
always require modifications	Yes	126	544.58	68616.50
	No	866	489.51	423911.50
	Total	992		
do not belong in music classes	Yes	126	448.30	56486.00
	No	866	503.51	436042.00
	Total	992		
should always be in music class(es)	Yes	126	620.78	78218.00
	No	866	478.42	414310.00
	Total	992		
are less expressive than "regular" students	Yes	126	418.27	52702.00
	No	866	507.88	439826.00
	Total	992		

Table 132

Mann-Whitney U Test Statistics, Agreement and Self-Contained Class

<i>Item vs. Teach a self-contained class Students with Special Needs...</i>	<i>U</i>	<i>W</i>	<i>Z</i>	<i>Asymp. Sig. (2-tailed)</i>
participate well in music	43744.50	419155.50	-4.00	.000
are disruptive in music classes	46704.50	422115.50	-2.79	.005
always require modifications	48500.50	423911.50	-2.16	.031
do not belong in music classes	48485.00	56486.00	-2.41	.016
should always be in music class(es)	38899.00	414310.00	-5.40	.000
are less expressive than "regular" students	44701.00	52702.00	-3.59	.000

Conditions and modifications. When respondents who selected specific accommodations and modifications were compared with those who did not, all items indicated significant differences between the two groups. Table 133 shows the Chi-Square for this final item indicating that for every item, or almost every item there was a significant difference between how many chose the item versus how many did not choose it. Looking back at Table 36, the frequencies indicate which items were chosen most often for each. In general, for the majority of the items, more people did not select it than did, and often this was by a very wide margin.

Table 133

Chi-Square for Conditions and Modifications

<i>Condition</i>	<i>Modification</i>	<i>Chi-Square</i>	<i>df</i>	<i>Asymp. Sig.</i>
Specific Learning Disability	Adaptive Instruments	390.861 ^a	1	.000
	Extended Writing Time	62.091 ^b	1	.000
	Verbal vs. Written Answers	72.733 ^b	1	.000
	Sound Canceling or Amplification Devices	519.673 ^b	1	.000
	Modified Assignments and/or Music Parts	18.861 ^a	1	.000
	Preferred Seating	83.534 ^a	1	.000
	Paraprofessional/ Instructional Support	188.148 ^b	1	.000
	None	402.903 ^b	1	.000
Speech or Language Impairments	Adaptive Instruments	757.940 ^b	1	.000
	Extended Writing Time	484.796 ^b	1	.000
	Verbal vs. Written Answers	303.227 ^b	1	.000
	Sound Canceling or Amplification Devices	638.108 ^b	1	.000
	Modified Assignments and/or Music Parts	151.681 ^a	1	.000
	Preferred Seating	131.634 ^a	1	.000
	Paraprofessional/ Instructional Support	437.461 ^b	1	.000
	None	26.584 ^b	1	.000
Visual Impairments (Blindness, Low Vision, Strabismus, Nystagmus)	Adaptive Instruments	529.517 ^a	1	.000
	Extended Writing Time	678.033 ^b	1	.000
	Verbal vs. Written Answers	340.443 ^b	1	.000
	Sound Canceling or Amplification Devices	816.152 ^b	1	.000
	Modified Assignments and/or Music Parts	89.563 ^a	1	.000
	Preferred Seating	9.490 ^b	1	.002
	Paraprofessional/ Instructional Support	402.903 ^b	1	.000
	None	45.057 ^b	1	.000
Hearing Impairments (Conductive, Sensorineural)	Adaptive Instruments	641.389 ^b	1	.000
	Extended Writing Time	757.940 ^b	1	.000
	Verbal vs. Written Answers	634.836 ^b	1	.000
	Sound Canceling or Amplification Devices	143.803 ^a	1	.000
	Modified Assignments and/or Music Parts	288.420 ^a	1	.000
	Preferred Seating	30.357 ^a	1	.000
	Paraprofessional/ Instructional Support	426.676 ^b	1	.000
	None	28.628 ^b	1	.000

Note. a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 476.0. b. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 475.5.

(continues)

<i>Condition</i>	<i>Modification</i>	<i>Chi-Square</i>	<i>df</i>	<i>Asymp. Sig.</i>
Orthopedic Impairments (cerebral palsy, spina bifida, amputations)	Adaptive Instruments	244.038 ^a	1	.000
	Extended Writing Time	688.203 ^b	1	.000
	Verbal vs. Written Answers	596.224 ^b	1	.000
	Sound Canceling or Amplification Devices	903.606 ^b	1	.000
	Modified Assignments and/or Music Parts	217.692 ^b	1	.000
	Preferred Seating	133.126 ^a	1	.000
	Paraprofessional/ Instructional Support	278.891 ^b	1	.000
	None	1.011 ^b	1	.315
Other Health Impairments (asthma, cystic fibrosis, epilepsy)	Adaptive Instruments	667.938 ^b	1	.000
	Extended Writing Time	733.149 ^b	1	.000
	Verbal vs. Written Answers	743.723 ^b	1	.000
	Sound Canceling or Amplification Devices	888.077 ^b	1	.000
	Modified Assignments and/or Music Parts	305.490 ^b	1	.000
	Preferred Seating	328.581 ^b	1	.000
	Paraprofessional/ Instructional Support	580.493 ^b	1	.000
	None	57.517 ^a	1	.000
Autism-Adaptive Instruments	Adaptive Instruments	482.861 ^a	1	.000
	Extended Writing Time	219.610 ^b	1	.000
	Verbal vs. Written Answers	193.524 ^b	1	.000
	Sound Canceling or Amplification Devices	453.890 ^b	1	.000
	Modified Assignments and/or Music Parts	.085 ^b	1	.770
	Preferred Seating	14.134 ^a	1	.000
	Paraprofessional/ Instructional Support	64.152 ^b	1	.000
	None	312.329 ^b	1	.000
Multiple Disabilities	Adaptive Instruments	365.651 ^a	1	.000
	Extended Writing Time	369.768 ^b	1	.000
	Verbal vs. Written Answers	312.329 ^b	1	.000
	Sound Canceling or Amplification Devices	583.623 ^b	1	.000
	Modified Assignments and/or Music Parts	75.445 ^a	1	.000
	Preferred Seating	74.324 ^a	1	.000
	Paraprofessional/ Instructional Support	208.228 ^b	1	.000
	None	2.129 ^b	1	.145
Developmental Delay	Adaptive Instruments	590.861 ^a	1	.000
	Extended Writing Time	274.575 ^b	1	.000
	Verbal vs. Written Answers	270.293 ^b	1	.000
	Sound Canceling or Amplification Devices	823.580 ^b	1	.000
	Modified Assignments and/or Music Parts	34.034 ^a	1	.000
	Preferred Seating	94.007 ^b	1	.000
	Paraprofessional/ Instructional Support	413.385 ^b	1	.000
	None	20.905 ^b	1	.000

Note. a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 476.0. b. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 475.5.

(continues)

<i>Condition</i>	<i>Modification</i>	<i>Chi-Square</i>	<i>df</i>	<i>Asymp. Sig.</i>
Traumatic Brain Injury	Adaptive Instruments	674.659 ^b	1	.000
	Extended Writing Time	618.600 ^b	1	.000
	Verbal vs. Written Answers	631.572 ^b	1	.000
	Sound Canceling or Amplification Devices	801.397 ^b	1	.000
	Modified Assignments and/or Music Parts	451.130 ^b	1	.000
	Preferred Seating	459.433 ^b	1	.000
	Paraprofessional/ Instructional Support	543.597 ^b	1	.000
	None	222.269 ^a	1	.000
Deaf-Blindness	Adaptive Instruments	629.282 ^a	1	.000
	Extended Writing Time	786.777 ^b	1	.000
	Verbal vs. Written Answers	651.282 ^b	1	.000
	Sound Canceling or Amplification Devices	645.647 ^a	1	.000
	Modified Assignments and/or Music Parts	385.752 ^a	1	.000
	Preferred Seating	398.588 ^a	1	.000
	Paraprofessional/ Instructional Support	504.994 ^b	1	.000
	None	162.407 ^b	1	.000
Emotional Disturbance	Adaptive Instruments	750.815 ^b	1	.000
	Extended Writing Time	424.001 ^b	1	.000
	Verbal vs. Written Answers	395.130 ^b	1	.000
	Sound Canceling or Amplification Devices	705.322 ^b	1	.000
	Modified Assignments and/or Music Parts	137.036 ^b	1	.000
	Preferred Seating	4.857 ^a	1	.028
	Paraprofessional/ Instructional Support	149.452 ^b	1	.000
	None	101.705 ^b	1	.000

Note. a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 476.0. b. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 475.5.

CHAPTER V

DISCUSSION

Because of the passage of Education of the Handicapped Act (1970), Section 504 of the Rehabilitation Act (1973), Public Law 94-142 (1975), and its reauthorization as the Individuals with Disabilities Education Act in 2004, students with special needs are now educated with their peers in classrooms across the United States. Music educators face unique teaching situations, due to large class sizes, unusual schedules, and large numbers of students seen daily, and weekly. The inclusion of students with special needs can add to the complexity of music education.

Previous research addresses music educator preparation (Colwell & Thompson, 2000; Gilbert & Asmus, 1981; Hahn, 2010; Hammel, 2001; Heller, 1994; Hourigan, 2007). This research determined that colleges and universities do offer coursework related to working with students with special needs, however, that coursework is not music-specific. Music educators also reported that while they had coursework, discussion was the main mode of instruction, and there were few opportunities for observation or fieldwork with students with special needs. Pre-service teachers also reported that students with learning disabilities, visual or hearing disabilities, and mental retardation (now recognized as developmental delay) were the most discussed in coursework. Most music educators also reported teaching students with special needs, and providing accommodations and modifications. While they were at least aware of legislation, they also reported that they were not often included in the placement process for such students. Elementary and general music teachers were more familiar with the legislation and the

IEP process. Even with the identified coursework, competencies identified, and practices, music educators are still underprepared for working with students with special needs.

Others have also examined music educators' attitudes and perceptions regarding working with students with special needs (Bompani, 2005; Damer, 1979; Darrow, 1999; Gfeller, Darrow, & Hedden, 1999; Hourigan, 2007; Jellison, & Taylor, 2007; Nabb, & Balcetis, 2010; Scott, Jellison, Chappell, & Standridge, 2007; Sharrock, 2007; VanWeelden, K., & Whipple, J., 2012; VanWeelden, K., & Whipple, J., 2014). Overall, these studies indicate that music educators have a positive attitude regarding the inclusion of students with special needs, and do provide accommodations and modifications as needed. However, music educators also identified barriers to successful inclusion: (a) collaboration with other educators and families, (b) time for preparation, (c) varying ability levels and needs of students, (d) appropriate accommodations and modifications, and (e) administrative support. Fieldwork or hands-on experiences tended to improve music educators' attitudes and willingness to work with students with special needs, but most still feel they need more training (coursework or professional development). Music educators also feel that inclusion is beneficial for students with special needs, their peers, and the teachers themselves.

Finally, research exists regarding mainstreaming and inclusion practices (Atterbury, 1986; Frisque, Neibur, & Humphreys, 1994; Gavin, 1983; Gfeller, Darrow, & Hedden, 1990; Haywood, 2005; Lapka, 2005; VanWeelden and Whipple, 2014). Overwhelmingly, the music educators reported that they received little or no training for working with students with special needs. Many also reported that they were not included in the placement process and lacked support from administration and other educators. One other commonality was that socialization

was an important reason for the inclusion of students with special needs. These studies are important, but did not represent the Southeast United States.

Therefore, the purpose of this study was to examine the knowledge and inclusion practices of Southeastern music educators, specifically from the states of Alabama, Florida, Georgia, North Carolina, South Carolina, Tennessee, and Virginia. The goal was to collect some demographic data (for comparison), and assess what music educators know about the legislation, the different eligibility categories covered by said legislation, and accommodations and/or modifications that music educators were utilizing in their classrooms across the Southeast.

Participants ($N = 10,666$) were asked to complete an online questionnaire with three sections: (a) demographics, (b) training, special needs knowledge and processes, and (c) accommodations and modifications used. The majority of the respondents were from Alabama ($n = 198$, 19.2%) and North Carolina ($n = 296$, 28.79%). This can probably be attributed to the fact that the researcher is from the state of North Carolina, and is enrolled in the doctoral degree at Auburn, which is located in Alabama. The questionnaire was distributed to these two states from the researcher's university email address.

Overall, the majority of the participants indicated 11-15 years of teaching experience, while only 44 first-year teachers participated. Most of the participants completed a Bachelor's degree and were not currently enrolled in any other degree program. Surprisingly, most ($n = 350$, 34%) indicated they taught Pre-K music, followed by high school general music. The lowest number of participants taught middle school strings/orchestra. Overall, most of the respondents were high school teachers. This is different from previous studies.

Another finding of this study is that the majority of music educators reported having some type of coursework, professional development, or personal development related to teaching

students. Coursework was most often offered in the Bachelor's degree, and of those reporting having the coursework, all also reported that it was required for graduation. Over half of the courses required for graduation also included music specific content, but almost half (45.1%) of those did not require any type of fieldwork experience. Previous research indicated that students who had fieldwork had positive attitudes, and felt more comfortable and confident when working with students with special needs. There has been improvement in course offerings related to students with special needs, and most of those courses now offer music-specific content.

Most music educators also indicated they had professional development within the last year. However, it was not clear if it was part of school in-service training, or was voluntary. Most also did their own reading and research regarding teaching students with special needs, including specifically teaching music. This indicates music educators are aware of students with special needs in their schools and classrooms, but may also indicate that they feel their coursework or other professional development was not adequate, or that they have a lack of comfort and confidence when trying to include students with special needs. It also shows that music educators are willing to teach such students, and that if necessary, they will investigate ways to make inclusion successful.

Like previous studies, this study reveals that music educators are most familiar with Autism, specific learning disabilities, speech and language impairments, and other health impairments. More specifically, more music educators were more familiar with Autism (59.9%) than any of the other categories. It is unclear why they were more familiar with Autism than they others. However, it could be because of media exposure, or simply because they have more students with Autism in their classes. They reported being somewhat familiar with multiple disabilities, emotional disturbance, and less familiar with visual and hearing impairments and

orthopedic impairments. If coursework is being offered, college and university faculty may be able to incorporate more specific information regarding the different eligibility categories, so pre-service teachers are better prepared for what may come in their teaching positions.

Similarly to previous research, music educators also reported being unfamiliar with IDEA; most were not familiar at all with the zero-reject principle, the nondiscriminatory evaluation principle, the appropriate education principle, the procedural due process principle, and the parent/student participation principle. However, music educators were evenly split on their familiarity with 250 (24.9%) reporting being “very familiar” or “not familiar at all” with the least restrictive environment (n = 250, 24.9%). Most of the music educators in this study also were very familiar with the definition of the IEP, and almost as many were very familiar with the process. That said, around 10% were not familiar at all with the definition of an IEP or with the IEP process. Music educators probably realize there is legislation, but may not know the name of that legislation and the names of the principles covered by said legislation. Again, coursework offerings may be able to bridge the gap so that those entering the teaching profession will be more aware of what is required and expected.

This study also reveals that music educators are involved in the IEP some of the time, but there are still a significant number reporting that they are never consulted or involved in the process. In addition, almost half (45.4%) reported receiving information about students’ needs, while a small percentage (2.5%) reported never receiving information about students’ needs. Overall, over the half of the music educators are not consistently receiving information. Regardless, almost half of music educators in the Southeast always provided necessary accommodations and modifications and are comfortable doing so. Most also expressed some level of confidence in their ability to provide those accommodations and modifications.

However, the support of a paraprofessional or other instructional aid is still lacking with the largest numbers reporting they sometimes or never receive help. This finding is consistent with other studies. Improvement is still needed to increase the dialogue between music educators, exceptional children's educators, administrators, other school personnel, and the families of the students with special needs. This will allow for a more in depth examination of the student's needs, abilities, successes, and areas for improvement.

Consistent with other studies (Damer, 1979; Hawkins, 1991; White, 1982/1982, & Nabb & Balcetis, 2010), when reporting their attitudes about serving students with special needs, music educators agree that students with special needs participate well in music, and are accepted by their regular education peers. When asked if students with special needs are disruptive in music classes, most reported a neutral response. This could be because music educators do recognize that there are challenges associated with teaching students with special needs, though this study did not evaluate what educators felt those challenges were. In previous studies, those challenges included collaboration, time for preparation, administrative support, and varying ability levels and needs of students. The numbers of music educators in the Southeast were evenly divided on accommodations and modifications, with almost half (45.2%) feeling that students do not always need accommodations and/or modifications, but they did stop short of indicating that students never require accommodations and/or modifications. To ensure student success, further exploration of appropriate accommodations and modifications as well as dialogue among those serving the student can help determine which accommodations and modifications can best serve the student's needs.

The researcher sought to identify which accommodations and modifications were used most frequently by music educators in the Southeast. In the questionnaire, this question was in

matrix format, allowing the educators to identify any accommodations/modifications used for each of the eligibility categories identified under IDEA. Educators could choose more than one answer for each category. Overall, music educators indicated that they utilized preferred seating and modified assignments/music parts for every eligibility category. For the areas of orthopedic impairments, other health impairments, developmental delay, traumatic brain injury, and deaf-blindness, the largest total number indicated that they did not use any accommodations or modifications, but when they did, preferred seating and modified assignments/music parts were most frequently selected. This is likely due to the lower number of students with these particular conditions enrolled in schools and music programs. Almost three-fourths (74.2%) of music educators said they did not use any accommodations or modifications for students with traumatic brain injury. However, traumatic brain injury accounts for less than 1% of students served under IDEA. Music educators indicated they use a paraprofessional most often with students who are autistic or who have emotional disturbance.

Conclusions and Suggestions for Future Research

This document sought to answer eight research questions. While the detailed answers to these questions are in the results, the conclusions based on those answers are presented here.

Conclusions

First, over half of the respondents in this questionnaire had coursework, had professional development, did personal research and reading on special needs and on special needs and music. Second, though they did this work, overall, they were not as familiar with conditions and legal principles as one would expect based on the training they had. Third, many know about and participate in special needs processes, but a few still do not.

Next, though participants in this study indicate they provide accommodations and/or modifications, it is unclear how often they do this based on their lack of knowledge of conditions and legal principles. That said, most indicated they were comfortable on some level with providing accommodations and/or modifications, and most used modified assignments and/or music parts and preferred seating as their modifications. Fifth, there were mixed levels of agreement on how well special needs students participate, how much they were accepted in music classrooms, and whether or not they needed accommodations and/or modifications. In addition, for every, or almost every condition, less teachers indicated they provided specific modifications than those who indicated they did.

Finally, though the groups were of different sizes, and the results need to be taken with caution, differences existed between educators based on a variety of different variables including (a) teaching specialty, (b) teaching level, (c) education level, (d) related coursework, (e) professional development, (f) personal development, (g) how many classes they teach with special needs students, and (h) how many students they currently teach.

Future Research

Suggestions for future research include examination of alternative certification programs, and what kinds of coursework, assignments, and/or fieldwork are included in such programs. This study did allow participants to identify any program they participated in. However, it did not explore the specific alternative certification programs, and it is unclear if these programs, while allowing those to attain teaching certification in music, offer enough, if any, background in working with special needs.

Another area of further interest may be professional development related to students with special needs. While this study did investigate whether the music educators had professional

development, it is unclear if that professional development was required by the school system, or if the music educators attended the professional development voluntarily, through another professional organization. Along the same lines, it is clear from this study that music educators are teaching at least 1-2 students with special needs in a single class, and are doing their own reading and research on working with such students. This study did not explore what specifically music educators were reading and researching about and what types of students are being served in their classrooms. It would be interesting to investigate what types of special needs are being served, and which ones music educators' find the most challenging, therefore requiring the most reading and research.

Another area of interest may be further exploration of which accommodations and modifications are used in music classrooms. Music educators in this study clearly identified preferred seating and modified assignments or music parts as the most frequently used. They also indicated in some cases that they did not use any accommodations or modifications for some of the eligibility categories. However, it may be beneficial to explore why the other accommodations or modifications are not used more often, and how we can make music educators more aware of the possibilities, as well as better prepare them for how to make those accommodations and modifications work. It may also be of interest to explore how accommodations and modifications are determined for individual students, even through the IEP process, because in many cases students are given certain accommodations or modifications, but fail to utilize them fully.

Finally, this study did not examine any aspect of parental involvement in educating students with special needs. Specifically, it would be interesting to explore parental involvement specifically for music classes. While parents may be involved in the processes related to other

courses, are they involved in their students' placements into music classes? If so, what do parents see as challenges for both the teachers and their students in such classes?

Implications for Education

Music education and special needs education have come a long way in merging to give students with special needs valuable opportunities. However, there still seems to be room for improvement. Music educators and special needs educators, as well as other school personnel, families and students need to strive to communicate and collaborate effectively to meet the needs of the students. Administrators may be able to help by allowing time in the schedule for meetings and sharing of information. Families need to take full advantage of the parent and student participation principle, as outlined in the legislation, to communicate their desires and goals (both nonmusical and musical) for the students.

Colleges and universities are offering some coursework, including music-specific content and fieldwork placements, but there is still work to be done. First, alternative certification programs need to be reevaluated to see if they adequately address knowledge and skills related to working with students with special needs. Second, most music degree programs require a high number of hours for completion, but the curriculum needs to be examined to see if there are additional ways to incorporate information, activities, and/or courses into the already full requirements. Since most degree programs require an internship and/or student teaching placement, it is time for the college and university faculty and staff and the public or private school faculty and staff to have open dialogue about how to serve students with special needs. If pre-service teachers are going out into the schools for these placements, information could be included in the coursework, preparation for, or the orientation process, before those placements begin.

It is clear that the music educators in this study, for the most part knew at least something about teaching students with special needs. In addition, for the most part, the teachers in this study were making modifications for students who needed them, even though they may not always be part of the official process. Though this study provided some needed answers to questions, additional questions arose based on these results. The next step is to begin answering the new questions. Ultimately, one must realize that students with special needs should receive music education and receive modifications, as they are needed. It appears from this study, most music educators in this group agree.

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APPENDIX A:
IRB DOCUMENTS

**AUBURN UNIVERSITY INSTITUTIONAL REVIEW BOARD for RESEARCH INVOLVING HUMAN SUBJECTS
REQUEST FOR EXEMPT CATEGORY RESEARCH**

For Information or help completing this form, contact: **THE OFFICE OF RESEARCH COMPLIANCE**, 115 Ramsay Hall
Phone: 334-844-5966 e-mail: IRBAdmin@auburn.edu Web Address: <http://www.auburn.edu/research/vpr/ohs/index.htm>

Revised 2/1/2014 Submit completed form to IRBsubmit@auburn.edu or 115 Ramsay Hall, Auburn University 36849.

Form must be populated using Adobe Acrobat / Pro 9 or greater standalone program (do not fill out in browser). Hand written forms will not be accepted.

Project activities may not begin until you have received approval from the Auburn University IRB.

1. PROJECT PERSONNEL & TRAINING

PRINCIPAL INVESTIGATOR (PI):

Name Erin McRary Roper Title Ph.D. Candidate Dept./School C &T/College of Ed
Address 6 Hunters Ridge Ct. AU Email emc0009@auburn.edu
Phone 828-292-2768 Dept. Head Dr. Kimberly C. Walls

FACULTY ADVISOR (if applicable):

Name Dr. Jane M. Kuehne Title Professor Dept./School Curriculum and Teachi
Address 5040 Haley Center, Auburn, AL 38649
Phone (334) 844-6852 AU Email kuehnjm@auburn.edu

KEY PERSONNEL: List Key Personnel (other than PI and FA). Additional personnel may be listed in an attachment.

Name	Title	Institution	Responsibilities
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

The Auburn University Institutional Review Board has approved this document for use from
5/20/15 to 5/19/18
Protocol # 15-220 EX 1505

Received
MAY 07 2015
Research Compliance

KEY PERSONNEL TRAINING: Have all Key Personnel completed CITI Human Research Training (including elective modules related to this research) within the last 3 years? YES NO

TRAINING CERTIFICATES: Please attach CITI completion certificates for all Key Personnel.

2. PROJECT INFORMATION

Title: Working with Special Needs Students: Knowledge and Practices of Southeastern Music Educators

Source of Funding: Investigator Internal External

List External Agency & Grant Number: _____

List any contractors, sub-contractors, or other entities associate with this project.

List any other IRBs associated with this project (including those involved with reviewing, deferring, or determinations).

FOR ORC OFFICE USE ONLY			
DATE RECEIVED IN ORC:	<u>5.7.15</u>	by <u>UB</u>	APPROVAL # _____
DATE OF IRB REVIEW:	_____	by _____	APPROVAL CATEGORY: _____
DATE OF ORC REVIEW:	_____	by _____	INTERVAL FOR CONTINUING REVIEW : _____
DATE OF APPROVAL:	_____	by _____	
COMMENTS:	_____		

3. **PROJECT SUMMARY**

a. Does the research involve any special populations?

- YES NO Minors (under age 19)
 YES NO Pregnant women, fetuses, or any products of conception
 YES NO Prisoners or Wards
 YES NO Individuals with compromised autonomy and/or decisional capacity

b. Does the research pose more than minimal risk to participants? YES NO

Minimal risk means that the probability and magnitude of harm or discomfort anticipated in the research are not greater in and of themselves than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests. 42 CFR 46.102(i)

c. Does the study involve any of the following?

- YES NO Procedures subject to FDA Regulation Ex. Drugs, biological products, medical devices, etc.
 YES NO Use of school records of identifiable students or information from instructors about specific students
 YES NO Protected health or medical information when there is a direct or indirect link that could identify the participant
 YES NO Collection of sensitive aspects of the participant's own behavior, such as illegal conduct, drug use, sexual behavior or use of alcohol
 YES NO Deception of participants

If you checked "YES" to any response in Question #3 STOP. It is likely that your study does not meet the "EXEMPT" requirements. Please complete a PROTOCOL FORM for Expedited or Full Board Review. You may contact IRB Administration for more information. (Phone: 334-844-5966 or Email: IRBAdmin@auburn.edu)

4. **PROJECT DESCRIPTION**

a. **Subject Population** (Describe, include age, special population characteristics, etc.)

The subjects will be music educators from the Southeast United States. Each subject will teach general music, band, orchestra, or choir. Ages and years of teaching experience will vary.

b. Describe, step by step, all procedures and methods that will be used to consent participants.

- N/A (Existing data will be used)

The teachers will be asked to complete an online questionnaire. The first page of the questionnaire will provide consent information (see attached), and will ask if they wish to continue and complete the questionnaire. If they click "yes," they will be directed to the first question. If they click "no," they will be directed to a statement that says, "This questionnaire has ended."

- c. **Brief summary of project.** (Include the research question(s) and a brief description of the methodology, including recruitment and how data will be collected and protected.)

The purpose of this study is to attempt to answer the following research questions:

1. What coursework, professional development, or personal development have participants received/completed for working with students with special needs?
2. If participants in this study had any training, how long ago did they have that training?
3. How familiar are participants with the special needs specific conditions and principles of IDEA legislation?
4. How often do participants participate in special needs processes and/or receive instructional support for working with special needs students?
5. How often do participants provide accommodations and/or modifications for special learners?
6. How confident and comfortable are participants with providing accommodations and/or modifications?
7. How well do participants think special needs students participate in music classes?
8. What differences, if any, exist between participant's responses, based on the following demographic variables? Variables included: (a) teaching specialty,
9. (b) teaching level, (c) education level, (d) years of teaching experience, (e) related coursework, (f) professional development, (g) personal development, (h) how many classes they teach with special needs students, and (g) how many students they currently teach.

Potential participants will be selected from the National Association for Music Education (NAfME) membership lists. Participants will be asked to complete a brief questionnaire designed by the researcher. The questionnaire will include demographic information, but no identifying information will be garnered from the questionnaire. Qualtrics software will be used, which allows for a secure Internet connection. Qualtrics has also been set up to "not collect" IP addresses or other identifiable background information.

- d. **Waivers.** Check any waivers that apply and describe how the project meets the criteria for the waiver.

- Waiver of Consent (Including existing de-identified data)
- Waiver of Documentation of Consent (Use of Information Letter)
- Waiver of Parental Permission (for college students)

- e. **Attachments.** Please attach Informed Consents, Information Letters, data collection instrument(s), advertisements/recruiting materials, or permission letters/site authorizations as appropriate.

Signature of Investigator Erin M. Roper Date 5/7/15

Signature of Faculty Advisor Jane M. Kuehne Date 5-7-2015

Signature of Department Head Tom Walker Date 5-7-15

APPENDIX B:
QUESTIONNAIRE

Music Educator Knowledge: Special Needs

You are invited to participate in a research study to discover music educator knowledge and teaching practices with special needs students.

The study is being conducted by Mrs. Erin M. Roper, Doctoral Student in the Music Education Program, in the Department of Curriculum and Teaching, College of Education at Auburn University. You are invited to participate because you are a music educator who is a member of the National Association for Music Education (NAfME) who may or may not teach special needs students .

What will be involved if you participate? Your participation is completely voluntary. If you decide to participate in this research study, you will be asked to complete the following on-line questionnaire. Your total time commitment will be approximately 10 minutes.

Are there any risks or discomforts? The potential risk or discomfort you may have for this study is completing information about your background and teaching practices with special needs students.

Are there any benefits to yourself or others? There are no benefits to you from completing this questionnaire, though as an educator, you may become more aware of special needs students.

Will there be Compensation and/or Costs for this questionnaire? There is no compensation for completing this questionnaire. There are no costs to complete this survey.

If you change your mind about participating, you can withdraw at any time prior to hitting the final "submit" button on the questionnaire by closing your browser window. Once you "submit" your data, it is anonymous and it cannot be withdrawn since it will be unidentifiable. Your decision about whether or not to participate or to stop participating will not jeopardize your future relations with Auburn University, the College of Education, the Department of Curriculum & Teaching, nor the Music Education Program.

Your privacy will be protected. Any information obtained in connection with this study will remain anonymous. The data will be protected by the co-investigators. Information collected through your participation may be used in publications, research poster presentations, and conference presentations.

If you have questions about this study, please contact Mrs. Erin M. Roper at emc0009@auburn.edu. Alternately, you can contact her committee chair, Dr. Jane Kuehne by email at kuehnm@auburn.edu or by phone at 334-844-6852.

If you have questions about your rights as a research participant, you may contact the Auburn University Office of Research Compliance or the Institutional Review Board by phone (334) 844-5966 or e-mail at IRBadmin@auburn.edu or IRBChair@auburn.edu.

HAVING READ THE INFORMATION ABOVE, YOU MUST DECIDE IF YOU WANT TO PARTICIPATE IN THIS RESEARCH PROJECT. IF YOU DECIDE TO PARTICIPATE, PLEASE SELECT "YES" BELOW THAT YOU AGREE AND CLICK "CONTINUE" BELOW. OTHERWISE, YOU MAY CLOSE THE BROWSER WINDOW, OR SELECT "NO" AND THE QUESTIONNAIRE WILL END. COMPLETING THIS QUESTIONNAIRE SIGNIFIES YOUR WILLINGNESS TO PARTICIPATE IN THIS STUDY.

The AUBURN UNIVERSITY INSTITUTIONAL REVIEW BOARD (IRB) HAS APPROVED THIS DOCUMENT FOR USE FROM 5/20/2015 TO 5/19/2018. PROTOCOL # 15-220 EX 1505. YOU MAY PRINT A COPY OF THIS PAGE FOR YOUR RECORDS.

IF YOU DO NOT WISH TO COMPLETE THIS QUESTIONNAIRE, PLEASE CLOSE THE BROWSER WINDOW NOW. THANK YOU FOR YOUR CONSIDERATION.

-
- Yes, I will complete the questionnaire. Click Continue Below.**

In which state do you teach?

- Alabama
- Florida
- Georgia
- North Carolina

- South Carolina
- Tennessee
- Virginia
- Other, Please Specify:

CONTINUE

Teaching Experience, Areas and Levels, and Degree Information

Please provide information about your teaching areas and degree programs you completed, or degrees you are currently completing.

What degrees have you completed? *Select all that apply.*

- Bachelors
- Alternative Certification Masters
- Masters

- Education Specialist (Ed.S.)
- Doctorate (Ph.D., D.M.A., etc.)
- Other, Please Specify:

Are you currently enrolled in a degree program? If so which one?

- Not Applicable (NA)
- Alternative Certification Masters
- Masters

- Education Specialist (Ed.S.)
- Doctorate (Ph.D., D.M.A., etc.)
- Other, Please Specify:

CONTINUE

Teaching Experience, Areas and Levels, and Degree Information

How many years of teaching experience do you have?

- | | |
|--|---|
| <input type="radio"/> This is my first year. | <input type="radio"/> 21-25 |
| <input type="radio"/> 2-5 | <input type="radio"/> 26-30 |
| <input type="radio"/> 6-10 | <input type="radio"/> More than 30 years |
| <input type="radio"/> 11-15 | <input type="radio"/> Other, Please Specify: <input type="text"/> |
| <input type="radio"/> 16-20 | |

What is/are your primary Teaching Assignment(s)? *Select all that apply.*

- | | |
|--|--|
| <input type="checkbox"/> Pre-K Music | <input type="checkbox"/> Middle School Choir |
| <input type="checkbox"/> Elementary General Music | <input type="checkbox"/> High School Choir |
| <input type="checkbox"/> Middle School General Music | <input type="checkbox"/> Middle School Strings/Orchestra |
| <input type="checkbox"/> High School General Music | <input type="checkbox"/> High School Strings/Orchestra |
| <input type="checkbox"/> Middle School Band | <input type="checkbox"/> Other, Please Specify: <input type="text"/> |
| <input type="checkbox"/> High School Band | |

What grade level(s) do you currently teach? *Select all that apply.*

- | | |
|---|--|
| <input type="checkbox"/> Pre Kindergarten | <input type="checkbox"/> 7th grade |
| <input type="checkbox"/> Kindergarten | <input type="checkbox"/> 8th grade |
| <input type="checkbox"/> 1st grade | <input type="checkbox"/> 9th grade |
| <input type="checkbox"/> 2nd grade | <input type="checkbox"/> 10th grade |
| <input type="checkbox"/> 3rd grade | <input type="checkbox"/> 11th grade |
| <input type="checkbox"/> 4th grade | <input type="checkbox"/> 12th grade |
| <input type="checkbox"/> 5th grade | <input type="checkbox"/> Other, Please Specify: <input type="text"/> |
| <input type="checkbox"/> 6th grade | |



CONTINUE

Coursework

Think about your collegiate coursework.

Please answer the next questions.

Did you have coursework related to working with students with special needs?

- Yes
 No



CONTINUE

Coursework

In which degree program did you have the coursework?

- | | |
|--|---|
| <input type="checkbox"/> Bachelors | <input type="checkbox"/> Education Specialist |
| <input type="checkbox"/> Alternative Masters | <input type="checkbox"/> Doctorate (Ph.D., D.M.A., etc.) |
| <input type="checkbox"/> Masters | <input type="checkbox"/> Other Degree, Please Specify: <input type="text"/> |

Was the coursework you had required to graduate? If yes, for which degrees was it required?

Select all that apply.

- | | |
|--|---|
| <input type="checkbox"/> None of my degrees required this. | <input type="checkbox"/> Education Specialist |
| <input type="checkbox"/> Bachelors | <input type="checkbox"/> Doctorate (Ph.D., D.M.A., etc.) |
| <input type="checkbox"/> Alternative Masters | <input type="checkbox"/> Other Degree, Please Specify: <input type="text"/> |
| <input type="checkbox"/> Masters | |

Did the coursework have music specific content? If yes, in which degrees? Select all that apply.

- | | |
|--|---|
| <input type="checkbox"/> None of my degrees had this | <input type="checkbox"/> Education Specialist |
| <input type="checkbox"/> Bachelors | <input type="checkbox"/> Doctorate (Ph.D., D.M.A., etc.) |
| <input type="checkbox"/> Alternative Masters | <input type="checkbox"/> Other Degree, Please Specify: <input type="text"/> |
| <input type="checkbox"/> Masters | |

Did the coursework *require in-school or other field placements with students with special needs*?
If yes, in which degrees? Select all that apply.

- | | |
|--|---|
| <input type="checkbox"/> None of degrees required this | <input type="checkbox"/> Education Specialist |
| <input type="checkbox"/> Bachelors | <input type="checkbox"/> Doctorate (Ph.D., D.M.A., etc.) |
| <input type="checkbox"/> Alternative Masters | <input type="checkbox"/> Other Degree, Please Specify: <input type="text"/> |
| <input type="checkbox"/> Masters | |



CONTINUE

Professional and Personal Development

Think about any professional or personal development you've completed or are completing about special needs.

Please answer the next questions.

Have you attended professional development related to students with special needs?

- Yes
- No

If you attended professional development related to students with special needs, approximately how long ago did you attend?

- | | |
|---|---|
| <input type="radio"/> I have not attended any | <input type="radio"/> 3-4 years ago |
| <input type="radio"/> within the last year | <input type="radio"/> 4-5 years ago |
| <input type="radio"/> 1-2 years ago | <input type="radio"/> more than 5 years ago |
| <input type="radio"/> 2-3 years ago | |

Have you done your own research and reading about teaching students with special needs?

- Yes
- No

Have you done your own research and reading about teaching MUSIC to students with special needs?

- Yes
- No



CONTINUE

Music Classes and Special Needs

Think about the music classes you teach.

Please answer the next questions.

How many classes do you teach each day that have students with special needs?

- | | |
|--|-----------------------------------|
| <input type="radio"/> None of my classes have special needs students | <input type="radio"/> 5 |
| <input type="radio"/> 1 | <input type="radio"/> 6 |
| <input type="radio"/> 2 | <input type="radio"/> 7 |
| <input type="radio"/> 3 | <input type="radio"/> more than 7 |
| <input type="radio"/> 4 | |

What is the lowest number of students with special needs you have in a single music class?

- | | |
|--|----------------------------------|
| <input type="radio"/> None of my classes have special needs students | <input type="radio"/> 7-8 |
| <input type="radio"/> 1-2 | <input type="radio"/> 9-10 |
| <input type="radio"/> 3-4 | <input type="radio"/> 11 or more |
| <input type="radio"/> 5-6 | |

What is the highest number of students with special needs you have in a single music class?

- | | |
|--|----------------------------------|
| <input type="radio"/> None of my classes have special needs students | <input type="radio"/> 7-8 |
| <input type="radio"/> 1-2 | <input type="radio"/> 9-10 |
| <input type="radio"/> 3-4 | <input type="radio"/> 11 or more |
| <input type="radio"/> 5-6 | |

Do you teach music specifically for a self-contained class that only has students with special needs? If so, approximately how many students are in that class?

- Yes, approximately how many students?
- No I do not teach a self-contained class.



CONTINUE

Special Needs Information

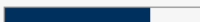
Think about how much you've learned about special needs (through courses, professional, and/or personal development).

Please answer the next questions.

How familiar are you with the following special needs conditions?

Use a scale of 1 to 5 where 1 = not familiar at all, and 5 = very familiar.

	Not Familiar At All				Very Familiar
	1	2	3	4	5
Specific Learning Disability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Speech or Language Impairments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Visual Impairments (Blindness, Low Vision, Strabismus, Nystagmus)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hearing Impairments (Conductive, Sensorineural)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Orthopedic Impairments (cerebral palsy, spina bifida, amputations)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other Health Impairments (asthma, cystic fibrosis, epilepsy)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Autism	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Multiple Disabilities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Developmental Delay	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Traumatic Brain Injury	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Deaf-Blindness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Emotional Disturbance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



CONTINUE

Special Needs Information

How familiar are you with the following special needs information?

Use a scale of 1 to 5 where 1 = not familiar at all, and 5 = very familiar.

	Not Familiar At All				Very Familiar
	1	2	3	4	5
IDEA	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Zero Reject Principle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nondiscriminatory Evaluation Principle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Appropriate Education Principle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Least Restrictive Environment Principle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Procedural Due Process Principle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Parent And Student Participation Principle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Definition Of An Individualized Education Program	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Individualized Education Program Process	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



CONTINUE

Special Needs Students and Music

Think about students with special needs you taught/teach in music.

Please answer the next questions.

How often do you participate in special needs processes and/or receive instructional support for working with students with special needs?

Use a scale of 1 to 5 where 1 = never and 5 = always. Mark "NA" if you do not currently teach or have never taught special needs students.

	Never	Almost Never	Sometimes	Almost Always	Always	NA
	1	2	3	4	5	
I participate in the IEP process.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I receive information about individual students and their needs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I provide accommodations or modifications.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am comfortable providing accommodations or modifications.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am confident in my abilities with students with special needs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have assistance from a paraprofessional or other instructional aid.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



CONTINUE

Special Needs Students and Music

Please rate your agreement level for the following statements about students with special needs.

Use a scale of 1 to 5, where 1 = Strongly Disagree and 5 = Strongly Agree.

Students with special needs...

	Strongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
participate well in music	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
are accepted by their peers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
are disruptive in music classes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
always require modifications	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
never require modifications	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
are difficult to teach	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
do not belong in music classes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
should always be in music class(es)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
are more expressive than "regular" students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
do not fit in with other students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
do not participate well in music	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
are not disruptive in music classes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
are less expressive than "regular" students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
are not accepted by their peers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
are not difficult to teach	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



CONTINUE

Special Needs Students and Music

For each of the following types of special needs conditions, mark the modification you currently make or have made in the past in your music class(es) with students with special needs.

If you haven't made an accommodation for a specific condition, mark "none" or leave it blank.

	Adaptive Instruments	Extended Writing Time	Verbal vs Written Answers	Sound Canceling or Amplification Devices	Modified Assignments and/or Music Parts	Preferred Seating	Paraprofessional/ Instructional Support	None
Specific Learning Disability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Speech or Language Impairments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Visual Impairments (Blindness, Low Vision, Strabismus, Nystagmus)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hearing Impairments (Conductive, Sensorineural)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Orthopedic Impairments (cerebral palsy, spina bifida, amputations)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other Health Impairments (asthma, cystic fibrosis, epilepsy)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Autism	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Multiple Disabilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Developmental Delay	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Traumatic Brain Injury	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Deaf-Blindness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Emotional Disturbance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



CONTINUE

Comments

Please write any additional comments you would like to make about this questionnaire or about teaching music to students with special needs.

This is the end of the questionnaire. THANK YOU for your answers!

Click the "CONTINUE" button below to record your answers!



CONTINUE

We thank you for your time spent taking this survey.
Your response has been recorded.



APPENDIX C:
NAFME RESEARCH ASSISTANCE FORM



RESEARCH ASSISTANCE FROM NafME

NAfME has had a long association with the research community in schools, colleges and universities, and through our members who have a keen interest in supporting research efforts in the field of music education. We wish to support those who need to communicate in a broad and timely fashion with potential research subjects or collaborators (e.g. members who might be asked to complete a survey, participate in an experimental research study, or collaborate in evaluating the effectiveness of a new instructional strategy). With this in mind, **NAfME is pleased to provide indirect access to the association's membership list using our e-mail transmission platform.**

The purpose of providing this research assistance is to allow those with a legitimate research program or material to reach out to NAFME's membership in a way that might result in the collection of additional data points that may be useful to complete ongoing research projects. The majority of our members are in the United States. Our members represent all interests, specialties and teaching levels, with experience ranging from the Collegiate and first-year teacher to highly skilled and seasoned professionals. The list is highly accurate, and current. We estimate that nearly 50% of all music educators in the U.S. are NafME members. **This is your opportunity to send a research-related message to NAFME members. This service is available for members only.**

Research Transmission via Email - Details:

- **Standard Transmission: \$50.00**
 - **Includes:** Transmission of an HTML or text-based e-mail to **5,000 members or fewer**, with up to 2 selection criteria (example: states, teaching levels, etc.), using NAFME's mass e-mail transmission tool.
 - The transmission is sent by NAFME on the individual's / company's / institution's behalf.
 - An NAFME staff member will request the text that will be included in your e-mail, and will transfer it to our system. The blast will be sent using a standard NafME (design) template.
 - Minor proofing of design and content is included as part of the standard service.
 - Though **member e-mail addresses are not provided directly to the client** as part of this program, you may elect to forward members to a survey or other related tool, or have replies sent to a specific survey tool, department or staff member.
 - NAFME will confirm final cost and request final approval from client prior to transmission.
 - E-mails are approved / scheduled **within five business days** upon receipt of order and payment, based on network availability.
 - **Requirements:** Proof of current membership and a **valid IRB (Institutional Review Board) number** must be presented to NAFME by the client prior to any approval/scheduling of e-mail transmissions.
 - **The following disclaimer must be included in the e-blast text:** "This invitation is sent as a service to the profession by NAFME, as part of our ongoing efforts to support research in music education. The sending of this invitation does not constitute endorsement of the content or quality of the research project for which this invitation is sent by NAFME or its component Societies or Councils."
 - **Regarding Content:** NAFME reserves the right to approve ALL content prior to transmission. NAFME will deny requests for transmission of messages/materials which include non-research-related material and/or links to specific product sales pages.
- **Additional Services:**
 - Transmission to more than 5,000 members: **\$25.00 for each add'l 5,000 members (or portion thereof)**
 - Additional list criteria (in excess of 2 criteria): **\$10.00 per criteria**
 - Re-send to original distribution list (non-responders only): **\$25.00**
 - Rush Order (guaranteed transmission in less than five business days): **\$25.00**
- **To Order:**
 - Provide a copy of the completed order form, payment, and .a sample of your intended text. Membership and a valid IRB number are required. Send all materials to NafME by mail or e-mail. See the order form for the current mailing address / e-mail address.



RESEARCH ASSISTANCE ORDER FORM

Mail: NAFME, Attn: Mike Blakeslee, 1806 Robert Fulton Drive, Reston, VA 20191. E-mail: mikeb@nafme.org.

NAME _____ Member ID _____
 COMPANY / INSTITUTION _____ IRB Number _____
 PHONE _____ E-MAIL _____
 ADDRESS _____
 CITY _____ ST/PROV _____ ZIP _____

List Criteria (first 2 are free):

Please list any specifications below, according to geography (ZIP, state, foreign), teaching level (elementary, higher education, etc.) and/or teaching area (choral, instrumental, jazz, etc.).

Geography (please choose one): BY STATE BY ZIP CODE (range)

Details: _____

Teaching Level:

Private/Studio Pre-School
 Elementary Only Middle School / Jr. High Only
 High School Only K-12 Collegiate (students)
 Higher Ed (professors, staff) None (no charge)
 Other (please list): _____

Interest Area:

Band Orchestra Choral Marching Band
 Guitar Voice Show Choir
 Jazz Special Education Teacher Education
 Research Hist/Theor/Comp General Music
 Mariachi Technology Keyboard

Services Requested (select all that apply):

- Transmission to 5,000 members (see details on page 1): **\$50.00**
- Basic Proofing/Programming Time : **Included**
- Additional List Criteria (in excess of 2): **\$10.00 x _____**
- Transmission to an additional 5,000 members **\$25.00 x _____**
- Re-send to non-responders: **\$25.00 x _____**
- Rush Order (guaranteed transmission < 5 business days): **\$25.00**

SUBTOTAL (est.): \$ _____

Payment Type:

Credit Card Check

If credit, please choose: Visa MasterCard Amex Discover

Credit Card Number: _____ Exp. Date: _____ CVV: _____

Name (as it appears on card): _____

Agreement: By signing this form below, you agree that you have the full power and authority to enter into this agreement on behalf of your company or institution. The company / institution agrees that this transmission shall be for legitimate research purposes, and is not intended to serve as a sales tool.

Signature of Representative: _____ **Date:** _____

Current as of 1/2015. This service is available to members only. Rules and restrictions subject to change without notice.