Music Teacher Preparation for Inclusion of Students with Special Needs: Survey of Music Teacher Educators in the United States

by

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Abstract

Current music teacher educators at colleges and universities were examined to determine how they prepare preservice music teachers to work with students with special needs.

Participants included music education professors from 31 states. I used an internal review, a peer review, and a pilot study to test for content and face validity. The anonymous questionnaire was distributed via the National Association for Music Education (NAfME) Research Survey

Assistance program. Questions were grouped into five categories: (a) demographic information;

(b) K-12 professional experience; (c) personal training to work with students with special needs;

(d) college teaching responsibilities/course content; and (e) proposed changes to course content/curriculum.

Data analysis of results consisted primarily of descriptive statistics (frequencies and percentages). Most participants rated their own undergraduate preparation to work with students with special needs as less than adequate; however, they also rated their post-undergraduate preparation to work with students with special needs as adequate or higher. A Spearman correlation coefficient indicated a moderate, positive, monotonic correlation observed between methods courses participants taught and SPED topics incorporated into these courses. The more undergraduate music methods courses participants taught, the more likely they were to incorporate SPED topics into these courses.

Future research recommendations include replicating this study using College Music Society members, applied music faculty, etc. Additionally, researchers could survey music teacher educators and preservice music teachers from an exemplar music program regarding how the program prepares future music teachers to work with students with special needs. Another recommendation includes a longitudinal study of this same exemplar music education program.

Preservice music teachers would be surveyed and interviewed prior to student teaching and following completion of their first year of teaching regarding how the program prepares them to work with students with special needs. Before and after results would be compared to look for differences and trends.

Results from this study may benefit music education by informing music teacher educators and institutional administrators of the trends from this study. More research is needed in this field to uncover how music teacher education programs prepare preservice music teachers to work with students with special needs.

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Chapter 1

Introduction

K-12 American public school education transformed dramatically with the enactment of legislation focusing on students with special needs. Prior to 1975, these ostracized students typically received education separated from their non-disabled peers in different classrooms or schools. Beginning in 1975 with passage of the *Education for Handicapped Children Act* (EHA) renamed the *Individuals with Disabilities Education Act* (*IDEA*) in 1990, schools gradually mainstreamed students with special needs into general education classrooms. As mainstreaming exceptional students in classes such as music increased, inclusion (which resulted from an amendment of *IDEA*) steadily replaced mainstreaming as the accepted method of placement of students with special needs in general education classes with their non-disabled peers. Today, most students with special needs are educated in general education classes with their non-disabled peers for most of the school day (see Appendix A-1). Although music was not specifically mentioned in the original legislation, the Senate Report from 1977 included arts.

Music was implied as part of the arts, and this led to music educators being some of the first teachers to see students with special needs in their classrooms.

Selected History and Legislation

Many landmark pieces of legislation revolutionized how students with special needs received education in this country. *Brown v. Board of Education of Topeka* (1954), the court case meant to end segregation in our schools, also influenced many Americans' beliefs that all people had a right to public education regardless of race or disability. The *Elementary and Secondary Education Act (ESEA)* of 1965 directly addressed students with special needs by providing federal funding for public education of all students including exceptional learners. *Section 504* of

the *Rehabilitation Act of 1973* (P.L. 93-112), another piece of important legislation, directly affected the education of K-12 students with special needs. This law guaranteed a Free and Appropriate Public Education (FAPE) to children with disabilities. FAPE served as one of the six main elements of EHA, or Public Law 94-142 (P.L. 94-142), and the many amendments to this law which followed.

Although Congress passed legislation to provide education for all students, most children with disabilities were fully excluded from their non-disabled peers prior to 1975 (Pulliam & Van Patten, 2006). This system began to evolve when President Ford signed The *Education for Handicapped Children Act* (P.L. 94-142) in 1975 which required "...states and localities to fund new programs for the handicapped, and it established the educational guidelines for children's inclusion in public schools" (Atterbury, 1986, p. 6). This monumental law, the most expansive and comprehensive education law ever passed by Congress to date, incorporated free and appropriate public education from P.L. 93-112. The intent of the legislation guaranteed a least restrictive environment for all students as part of their free appropriate public education. The portion of the law affecting music education and music educators was:

The State has established . . . (B) procedures to assure that, to the maximum extent appropriate, handicapped children, including children in public or private institutions or other care facilities, are educated with children who are not handicapped, and that special classes, separate schools, or other removal of handicapped children from the regular educational environment occurs only when the nature or severity of the handicap is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily. . . [Sec. 614(a)(5)]

P.L. 94-142 remains influential on special education in the US nearly 50 years after enactment into law.

Public demands, most notably led by parents of students with special needs, resulted in several amendments of P.L. 94-142. In 1990, Congress renamed the law to the *Individuals with Disabilities Education Act (IDEA)*, or P.L. 101-476. According to the US Department of Education website, the purpose of *IDEA* was:

- to ensure all children with disabilities have available to them a free appropriate public education emphasizing special education and related services designed to meet their unique needs and prepare them for further education, employment, and independent living;
- to ensure the rights of children with disabilities and parents of such children are protected;
- to assist States, localities, educational service agencies, and Federal agencies to provide for the education of all children with disabilities;
- to assist States in the implementation of a statewide, comprehensive, coordinated,
 multidisciplinary, interagency system of early intervention services for infants and
 toddlers with disabilities and their families;
- to ensure educators and parents have the necessary tools to improve educational results
 for children with disabilities by supporting system improvement activities; coordinated
 research and personnel preparation; coordinated technical assistance, dissemination, and
 support; and technology development and media services;
- to assess, and ensure the effectiveness of, efforts to educate children with disabilities.
 (U.S. Department of Education, n.d.)

Since original passage in 1975, the six basic principles of *IDEA* included: (a) a free and appropriate public education (FAPE) for all children with disabilities; (b) least restrictive environment (LRE) of educational services; (c) individualized education program (IEP) for each student; (d) eligibility of students using nondiscriminatory evaluations; (e) both parents and all teachers of student have a right to be included in the development of and IEP process; and (f) procedural safeguards to ensure requirements of the law are met. *IDEA* retained the original intent of previous laws as FAPE and LRE remained essential elements of the revised law.

Congress amended *IDEA* in 1997 by P.L. 105-17.

Most recent changes to special education involved the reauthorization of laws passed prior to *IDEA*. In 2001, Congress reauthorized ESEA and President Bush signed the *No Child Left Behind Act* (NCLB), or P.L. 107-110, into law. NCLB focused attention in education to support standards-based classrooms, and scores of students with special needs counted the same as their non-disabled peers (all students took the same assessments). Congress amended *IDEA* in 2004 to better align with NCLB by passing P.L. 108-446. More recently, the reauthorization of ESEA (2015) affected the education of students with special needs as President Obama signed *Every Student Succeeds Act* (ESSA) into law. ESSA (P.L. 114-95), meant to replace NCLB, greatly changed assessments of students with disabilities since they were previously required to complete the same tests and held to the same standards as their non-disabled peers.

The number of students receiving special education services in public schools in the US increased dramatically because of PL 94-142. Factors such as increased parental and educator knowledge and involvement resulted in more students testing through early intervention although childhood illness and low birth weight contributed to the surge in students with special needs receiving special education services (Pamuk et al., 1998). Atterbury (1993) stated, "special

education services have expanded far beyond the boundaries envisioned by the framers of P.L. 94-142" when commenting on the large increase of students being served by special education services since the passage of *IDEA* (p. 22). Since the enactment of the P.L. 94-142 in 1975 and later *IDEA* in 1990, Section 618(f)(1) of Part B required the Secretary of the US Department of Education submit an annual report to Congress and the public on the progress completed in executing the act. These annual reports reflected a history of determined commitment by Congress and the US Department of Education to increasing educational opportunities available to children with disabilities and special needs.

According to the National Center for Education Statistics (2019), the number of children (age 3-21) served by federally supported special education programs increased from 3.7 million students in 1976-77 to 6.7 million students in 2015-16 (current estimates suggest over 7 million students). The percentage of total school enrollment representing children served by federally supported special education programs increased from 8.3% in 1976-77 to 13.2% in 2015-16 (current estimates suggest 14%). As the percentage of children served by federally supported special education programs increased, so too did the amount of time these students spent in regular classrooms with their non-disabled peers. Most recently, the 40th Annual Report to Congress on the Implementation of the *Individuals with Disabilities Education Act*, 2018 stated:

In 2016, a total of 5,740,172, or 94.9%, of the 6,048,882 students ages 6 through 21 served under *IDEA*, Part B, were educated in regular classrooms for at least some portion of the school day. The majority (63.1%) of students ages 6 through 21 served under *IDEA*, Part B, were educated inside the regular class 80% or more of the day. A total of 18.3% of students ages 6 through 21 served under *IDEA*, Part B, were educated inside the regular class 40% through 79% of the day, and 13.4% were educated inside the regular

class less than 40% of the day. Only 5.1% of students ages 6 through 21 served under *IDEA*, Part B, were educated outside of the regular classroom. (p. xxvii)

The percentage of students (ages 6-21) served under *IDEA* who spent most of the day (80% or more) in general education classes increased from 47% in 2000 to 63% in 2017 (National Center for Education Statistics, 2019). In contrast, the percentage of students who spent less than 80% of the day in general education classes decreased during the same period. In a recent annual report (40th Annual Report to Congress, 2018), the US Department of Education also reported on different disabilities. Among students ages 6-21 served under *IDEA*, Part B, the most prevalent disability was specific learning disability (38.6%), followed by speech or language impairment (16.8%), other health impairment (15.4%), autism (9.6%), intellectual disability (6.9%), and finally emotional disturbances (5.5%).

As students served by federally supported special education programs continually increased, general education teachers assumed greater demands and responsibilities as most of these students spent at least 80% of their day in general education classes. Perceptions and attitudes of music educators regarding mainstreaming and inclusion of students with special needs in the music classroom positively increased over time (VanWeelden & Whipple, 2014b). Yet, music educators consistently reported inadequate preparation regarding their special education training (Atterbury, 1986; Frisque et al., 1994; Gfeller et al., 1990; Gilbert & Asmus, 1981; Salvador, 2010; Sideridis & Chandler, 1995; White, 1981/1982), lack of involvement in the IEP process (Douglas-Kline, 2015), and shortage of in-service professional development opportunities to work with exceptional populations (VanWeelden & Whipple, 2014b). Colleges and universities made few changes to music teacher training programs even though music educators consistently requested better preparation to work with students with special needs.

Definitions

- Mainstreaming is the placement of a child with special needs in general classes with their non-disabled peers for at least one period of the day, for part of the day, or for the entire school day (Atterbury, 1990). In mainstreaming, students with special needs were pulled out of self-contained classrooms or pullout programs and moved to general classrooms (i.e. music, art, or physical education) based on their abilities.
- *Inclusion* is the placement of a child with special needs in general classes with their non-disabled peers for the majority of or entire day at school. Aids and or special education staff assist the student and/or general education teacher with instruction. Gradually, the public interpretation of the least restrictive environment principle of EHA (and later with *IDEA*) evolved which led to full inclusion of students with special needs in general classes with their non-disabled peers thus replacing the antiquated concept of mainstreaming. Full inclusion, as the common means of students with special needs receiving their education during the school day, reflects acceptance and cultural normalization of these *IDEA* requirements (Jellison, 2015).
- Exceptional Students (or Learners) is a term describing individuals with disabilities
 and/or special needs and to those who are gifted who require additional or specialized
 services or accommodations.
- Special Needs are various difficulties (such as a physical, emotional, behavioral, or learning disability or impairment) that causes an individual to require additional or specialized services or accommodations (Merriam-Webster, n.d.).
- Public Law (P.L.) is a legislative enactment affecting the public at large (Merriam-Webster, n.d.).

Statement of the Problem

After a thorough review of the literature, I found only three studies addressing how music teacher preparation programs trained undergraduate music education majors to work with students with special needs (Colwell & Thompson, 2000; Heller, 1994; Salvador, 2010). Heller (1994) examined music teacher educators' experiences and perceptions teaching students with special needs in the K-12 setting. She also compared how these experiences affected the methods used by the participants to prepare undergraduate music educators to work with exceptional learners. Researchers completed two other studies focusing on music teacher preparation to work with exceptional learners (Colwell & Thompson, 2000; Salvador, 2010) and determined participants implemented few changes to coursework in comparison to previous literature (Heller, 1994).

Many of our music teacher preparation programs consistently produced graduates who felt inadequately prepared to teach students with special needs. Heller (1994) concluded many music teacher educators felt ill prepared to train future music educators to work with students with special needs. VanWeelden and Whipple (2014a; 2014b) found similar results compared to previous literature (Colwell & Thompson, 2000; Heller, 1994; Salvador, 2010). VanWeelden and Whipple reported few changes to coursework, inadequate training of music educators to work with students with special needs, lack of acceptable administrative support, and exclusion of music educators from placement decisions of exceptional learners.

Inconsistent training practices of future music educators to work with exceptional learners emerged as a common trend in the literature (Colwell & Thompson, 2000; Salvador, 2010). Some programs required undergraduates to complete a music content-specific course on music and special education while other programs required undergraduates to complete a special

education course but did not offer content-specific courses in music. Other programs maintained no requirements for their undergraduates to work with students with special needs. Furthermore, some programs integrated topics related to exceptional learners into music education methods courses while other programs inconsistently addressed these topics (Colwell & Thompson, 2000; Salvador, 2010). Colwell and Thompson (2000) stated:

Many music education faculty may not feel comfortable training students in the current laws applicable to mainstreaming, or feel well versed in presenting information about the diversity among disabilities or the techniques necessary for adapting general music activities or secondary rehearsal strategies. (p. 219)

Later, Salvador (2010) found similar results as several respondents said "planned opportunities" for their future music educators was a deficiency in their program due to lack of faculty expertise to address exceptional learners (p. 33). While literature that is more recent indicates some improvement in music teacher attitudes about inclusion (VanWeelden & Whipple, 2014a), many important questions remain unanswered as no recent studies were located in the field of music teacher preparation.

Need for the Study

Inclusion replaced mainstreaming as the accepted method of placing students with special needs into classrooms following amendments of *IDEA*. Researchers conducted numerous regional and national studies on music teacher attitudes, music teacher preparation programs, and in-service professional development (mentioned previously). Although some music teachers in earlier studies disagreed with mainstreaming by favoring self-contained classrooms, recent studies showed generally positive attitudes of music teachers toward students with special needs. Research on the importance of field experiences to the preparation of future music educators

possibly led to some changes at music teacher preparation programs in the country (Hourigan, 2007a; Hourigan, 2007b; VanWeelden & Whipple, 2005; VanWeelden & Whipple, 2007). Yet, many in-service music teachers still felt inadequately prepared to work with students with special needs (VanWeelden & Whipple, 2014a). Music teachers remained frustrated with exclusion from the IEP process and little to no in-service professional development opportunities offered them related to exceptional students (VanWeelden & Whipple, 2014b). Few changes were found in preparing music teachers to work with exceptional learners since the Heller (1994) study, the first in this area.

Over time, music teachers reported inadequate preparation to teach students with special needs in their classrooms (Frisque et al., 1994; Gavin, 1983; Gfeller et al., 1990; Sharrock, 2007; Sideridis & Chandler, 1995). Several researchers explored the preparation of undergraduate music education majors to work with exceptional learners (Colwell & Thompson, 2000; Heller, 1994; Salvador, 2010); however, no recent research existed in this field. Further research is required to determine current music teacher educators' preparation to work with exceptional learners and how they train undergraduate music education majors to work with students with special needs.

Purpose of the Study

The main purpose of the present study was to determine how current music teacher educators prepared future music teachers to work with students with special needs. Heller (1994) compared music teacher educator perspectives with their own training and experience teaching exceptional students. More recently, VanWeelden and Whipple (2014a; 2014b) conducted regional and national studies in this field and found little change in how music teacher preparation programs trained future music educators to work with students with special needs.

The current study benefited the field of music teacher preparation. Data collected and analyzed answered the following research questions:

- RQ1. What are music teacher educators' attitudes about their professional preparation for including students with special needs in music courses?
- RQ2A. How do music education professors prepare preservice music educators to work with students with special needs?
- RQ2B. Does this preparation vary by professional title, number of years of university teaching experience, or previous K-12 teaching experience with students with special needs?
- RQ2C. Does this preparation vary by institutional characteristics including: location of college/university, enrollment size of college/university, or size of music department?
- RQ3. What changes, if any, are music education professors considering to improve how they prepare undergraduate music education majors to work with inclusion students with special needs?

Chapter II

Review of the Literature

The review of the literature was organized into three areas: (1) Beliefs and Attitudes of Music Educators toward Mainstreaming/Inclusion, (2) Music Teacher Education Programs, and (3) In-service Education and Professional Development.

Many exceptional learners received education separate from the general student population prior to P.L. 94-142, and this law was an effort to repair what many people felt was the broken system of special education. Congress revised the law several times after 1975, but the basic intent of the law remained unchanged: to provide a free and appropriate education to all students in the least restrictive environment. The law impacted music educators almost immediately as music was specifically mentioned in the language of the law as a fundamental component of the education of students with special needs and disabilities. Shortly after passage of P.L. 94-142, the Committee on Labor and Public Welfare presented the importance of the arts on the overall education of children with disabilities:

The use of the arts as a teaching tool for the handicapped has long been recognized as a viable, effective way not only of teaching special skills, but also of reaching youngsters who had otherwise been unteachable. The committee envisions that programs under this bill could well include an arts component and, indeed, urges that local educational agencies include arts in programs for the handicapped funded under this act. Such a program could cover both appreciation of the arts by the handicapped youngsters and the utilization of the arts as a teaching tool per se. (Smith, 1995, pp. 128-129)

P.L. 94-142 rapidly affected arts educators as students with special needs often were placed in their classes before other content areas.

Mainstreaming involved placing students with special needs and/or disabilities in general education classrooms for a portion of the day (and most commonly in music, art, or P.E. classes). Atterbury (1990) defined mainstreaming as "placing exceptional students in non-handicapped classes for one period, for part of a day, or for their entire schooling" (p. xiii). Following amendments to P.L. 94-142, mainstreaming became more accepted and widespread throughout the country. More exceptional learners were mainstreamed into general education classes as the implementation of mainstreaming increased.

The inclusion of students with special needs in classrooms greatly impacted elementary and secondary educators (Frisque et al., 1994; Gfeller et al., 1990; Shepard, 1993; Sideridis & Chandler, 1995) yet teacher education programs failed to respond to music teacher requests for better training (Colwell & Thompson, 2000; Heller, 1994; Salvador, 2010). Inclusion gradually replaced mainstreaming as the accepted method for placing students with special needs and/or disabilities in general education classrooms beginning in the late 1990s. Students with special needs were often mainstreamed or included into music or art classes prior to other general education classrooms. Exceptional learners were typically placed in music classes even though music teachers were rarely allowed to voice opinions regarding placement of these students.

Since the passage of P.L. 94-142, music teachers reported inadequate preparation to work with students with special needs and/or disabilities due to lack of training (Atterbury, 1986; Frisque et al., 1994; Gfeller et al., 1990; Gilbert & Asmus, 1981; Sharrock, 2007; Sideridis & Chandler, 1995; White, 1981/1982). Previously, music educators gave mostly positive attitudes regarding mainstreaming/inclusion of students with special needs (Brittin, 1995; Damer, 1979; Hawkins, 1991; Sideridis & Chandler, 1995; White, 1981/1982; Wilson & McCrary, 1996).

Although some researchers suggested a lack of support from music educators regarding

mainstreaming (Frisque et al., 1994; Gfeller et al., 1990), VanWeelden and Whipple (2014a) reported positive changes in this area among music teachers.

VanWeelden and Whipple (2014a) found music teachers' perceptions regarding the effectiveness of inclusion increased since previous studies (Frisque et al., 1994; Gfeller et al., 1990). Music teachers also reported higher levels of confidence in their abilities to include students with special needs in their music classes. This may have been due to better preservice or in-service training, NAfME state/national workshops, or professional development within local school districts. As music teachers became more familiar with teaching students with special needs, perceptions regarding effectiveness of inclusion in music classrooms positively changed (VanWeelden & Whipple, 2014a). However, music educators reported few changes to coursework (designed to prepare them to work with exceptional learners) they received during their undergraduate music education training. These common trends were repeated throughout the literature.

Beliefs and Attitudes of Music Educators toward Mainstreaming/Inclusion

Following the passage of P.L. 94-142, music educators inconsistently supported mainstreaming of exceptional learners into music classes. Stuart and Gilbert (1977) found music education majors reluctant to work with students with special needs. They showed participants videotapes of students exhibiting various types of behaviors associated with students with special needs. They surveyed participants (music education, music therapy, and dual majors) to determine their beliefs regarding the mainstreaming of students with special needs in music classes. Preservice music education majors' responses pointed to "...(a) less comfort in interacting, (b) less willingness to work professionally, and (c) less felt capacity in working professionally with the portrayed individual, than either music therapy or dual majors" (Stuart &

Gilbert, 1977, p. 289). The music education majors' responses indicated, "...preservice teachers are not sufficiently prepared for the behavioral and psychological impact of mainstreaming programs" (Stuart & Gilbert, 1977, p. 289) as the behavioral categories of individuals moved further away from "normal". The researchers suggested further evaluation of this topic was needed.

Music educators commonly complained of lack of training dating back to the first studies completed shortly after the passage of P.L. 94-142 in 1975 (Damer, 1979; Gavin, 1983; Gilbert & Asmus, 1981; White, 1981/82; White, 1984). Damer (1979) surveyed music teachers in North Carolina and found:

Very few expressed totally negative responses to the concept of mainstreaming. Some types of handicaps were more acceptable than others. In comparing the percentage of teachers who felt qualified to handle the specific handicaps to their responses on willingness to have these types of handicapped students mainstreamed if some form of aid were available...This study reveals that the music teachers who responded tend to be accepting of the mandate of P.L. 94-142 that handicapped students to the greatest extent possible be educated with nonhandicapped students. If in-service help and/or resource personnel are available, many music educators are willing to try to teach all types of handicapped students. (p. 68)

Although music teachers expressed a need for more training to work with students with special needs, most respondents already supported music education for all children.

While students with special needs were quickly placed into music classes, as mainstreaming became common practice, administrators and/or special education teachers rarely included music educators in IEP meetings or meetings to determine placement of these students.

Gilbert and Asmus (1981) conducted a nationwide survey of 789 K-12 general, instrumental, and vocal music educators and established 62.9% of music educators surveyed had some professional involvement with students with disabilities; yet, less than one-third of those surveyed were involved in the IEP process. Respondents did not express a need for additional training when working with this population of students. However, they expressed concerns with meeting the individual differences when teaching a large number of students with special needs and focusing on classroom management strategies relevant to the mainstreamed classroom.

Administrative support factored into music teachers' attitudes regarding mainstreaming/inclusion of exceptional learners into their classes. In White's research (1981/1982), 67 North Carolina K-12 music educators indicated mostly favorable attitudes toward the mainstreaming of students with special needs and/or disabilities in music classrooms. Respondents also suggested not all exceptional students should be mainstreamed in music classrooms. They also said special schools should still be offered for some of these exceptional students. White reported these beliefs might be due to respondents having only taught exceptional students mainstreamed in their music classes for two years following P.L. 94-142. Not enough time passed for attitudes to change regarding the continued need for special schools (White, 1981/1982). While 74% of elementary general music teachers willingly accepted exceptional students mainstreamed in their music classes, secondary music ensemble teachers less willingly (fewer than 40%) accepted exceptional students mainstreamed in their music classes. Overall, White found music teachers mostly favored the mainstreaming of exceptional students in their music classes if resources or in-service workshops were made available to support these teachers.

As mainstreaming exceptional learners increased rapidly following P.L. 94-142, some music teachers perceived mainstreaming negatively and voiced disapproval about their preservice music preparation. Gavin (1983) surveyed music educators from a large suburban school district who had implemented mainstreaming practices in music classrooms for several years. Results showed while 89% of respondents taught mainstreamed classes, only half of them were aware of mainstreaming legislature. Nearly 90% of respondents never participated in the IEP process. Almost 40% of respondents disapproved of mainstreaming, and nearly half of the music educators expressed concerns regarding their own lack of training teaching students with special needs. Many of the teachers said training to work with students with special needs was limited to in-service professional development.

By the middle of the 1980s, some music teachers felt their lack of preservice and inservice training hindered their ability to effectively educate students with special needs. White (1984) investigated North Carolina music educators' experiences and attitudes regarding mainstreaming exceptional students in music classes. Participants reported the mainstreaming of exceptional students in their music classes. White's results supported declining attitudes among general music teachers as 50% of the respondents no longer felt qualified to work with exceptional students when compared to previous research (White, 1981/82). Respondents described inconsistent or infrequent teacher workshops/in-service training offered by their districts to help them work with exceptional students. White discussed the importance of teacher training programs in preparing future music educators to work with exceptional students rather than relying on in-service teacher workshops/professional development.

Music teachers' perceptions regarding effectiveness of mainstreaming depended on preservice and in-service training and involvement in the IEP and placement process of students

with special needs. Atterbury (1986) surveyed 133 elementary music teachers who were members of the Music Educators National Conference (MENC) Southern Division to "... determine if the different learning abilities of mainstreamed exceptional children are being considered by administrators and music educators" (p. 204). Findings revealed conflicting results as respondents felt they were not getting support from administrators regarding participation in the IEP process and placement of too many mainstreamed students in music classes. Not all results were negative as 72% of respondents stated music instruction had been adjusted to meet the needs of exceptional learners. Ninety percent of respondents stated mainstreamed children had been accepted by their peers in the music classroom, and 95% of teachers said mainstreamed children were actively participating during music lessons. While participants did express an overall lack of support from administrators, results pointed to improvements in beliefs and attitudes of both music teachers and students regarding mainstreaming exceptional students in music classrooms.

Teacher attitudes regarding mainstreaming students with special needs in music classrooms shifted over time. Studies suggested this attitudinal shift among music teachers was due to perceived lack of training in dealing with exceptional students. Gfeller et al. (1990) surveyed over 500 music educators in Iowa and Kansas to determine the effectiveness of mainstreaming exceptional students in music classes. The researchers described developments in mainstreaming as only 42% of Iowa respondents and 59% of Kansas respondents indicated involvement in mainstreaming exceptional students in music classes. Furthermore, half the respondents suggested the needs of exceptional learners were better met in separate classes, and students with special needs hindered the progress of their nondisabled peers. P.L. 94-142 established students with special needs should be mainstreamed in general education classrooms

only when "...the regular classroom setting provides adequate educational support" (Gfeller et al., 1990, p. 96). The researchers indicated these needs were not regularly met. Although P.L. 94-142 did not require mainstreaming all exceptional students in regular classrooms, it mandated educating exceptional students in the least restrictive environment. Sixty-seven percent of respondents reported nonmusical goals as their primary objective when mainstreaming students with special needs in music classes. Yet, 63% of respondents expected this population of students to meet the same musical goals and standards as students without special needs or disabilities.

Teacher preparation and support affected respondents' perceived effectiveness and success of mainstreaming (Gfeller et al., 1990). These researchers found 38% of respondents indicated no formal training in special education, and 15% had attended workshops or in-service training in special education. Furthermore, 25% had a single college course in special education, and only 10% of respondents indicated a single college course with additional workshops or inservice training in special education. They concluded music educators were trying to teach students with special needs even though they lacked preparation to do so. In addition, music teacher attitudes of mainstreaming were not significantly altered by increased experience with students with special needs. Finally, Gfeller et al. (1990) suggested changes be made to preservice music education training to better prepare future music educators to work with students with special needs.

Mainstreaming greatly increased becoming the only choice for many schools when placing exceptional learners in classrooms. Music teachers' confidence in their abilities to effectively teach students with special needs decreased as more of these students were placed in music classes. Shepard (1993) surveyed 188 public school music educators in Atlanta, GA to test

the relationship between a series of variables (i.e. chronological age, ethnic background, educational level, years of teaching experience, etc.) and the dependent variable (teachers' attitudes toward students being mainstreamed in music classes). Shepard found only the number of undergraduate or graduate level special education courses taken significantly contributed to the music teachers' attitudes toward the mainstreaming of exceptional students in their music classes. No other independent variables significantly contributed to music teachers' attitudes regarding mainstreaming. While 72% of the respondents agreed with mainstreaming, 65% felt it was not practicable to teach all students in the same classroom (Shephard, 1993). Eighty-four percent of the teachers said mildly and moderately disabled students could be educated in music classrooms, but only 50% of the respondents felt personally prepared to serve these students in mainstreamed music classrooms. Half the respondents believed other music educators were better prepared to teach exceptional students than themselves even though many respondents agreed with the concept of mainstreaming. Shepard (1993) found "Fifty percent felt that disabled students' music education needs are better met in self-contained music classrooms and 41% felt that mainstreaming disabled students in regular music classrooms hampers progress of nondisabled students" (p. 95). Finally, most respondents did not regularly participate in special education meetings (17%) or the IEP process (11%). Shepard determined effective undergraduate training was essential to foster positive attitudes regarding mainstreaming among music educators.

Frisque et al. (1994) partially replicated another study (Gfeller et al., 1990) by surveying 107 K-12 Arizona music teachers to determine the nature of mainstreaming practices in music classes. According to Jellison and Taylor (2007), researchers replicate studies to "...track and compare changes across time and group" (p. 20). Approximately 90% of respondents indicated

participation in the mainstreaming of exceptional students in their music classes (Frisque et al., 1994). However, only 40% of these teachers received any formal training in special education, and only 20% of teachers received any training through workshops/in-service training. Whereas MENC advocated and recommended mainstreaming exceptional students in music classes based on musical ability, "...just over 3% of respondents in this study indicated that musical ability was the primary reason for mainstreaming students" (Frisque et al., 1994, p. 99). Sixty-two percent of respondents agreed or strongly agreed they could effectively teach exceptional students mainstreamed in music classes, but only 33% agreed or strongly agreed this same population of students was successfully mainstreamed in music classrooms. The respondents described questionable mainstreaming practices in their schools. Most (94%) respondents taught exceptional learners, yet few (40%) had received any formal training to work with these students. Finally, most (72%) rarely partook in the placement of these students in their music classes.

Music teachers' attitudes regarding inclusion appeared to be related to the type of disability associated with individual students. Sideridis and Chandler (1995) examined general music attitudes regarding the inclusion of students in music classes and whether they received sufficient funds and support materials. Although findings revealed positive attitudes toward the inclusion of students with learning disabilities and orthopedic handicaps, researchers also revealed educators' negative attitudes regarding inclusion of students with multiple handicaps, intellectual disabilities, and emotional and behavioral disorders. Participants expressed more concerns with disabilities perceived as causing more problems (i.e. multiple disabilities or behavior disorders) compared to learning disabilities and orthopedic impairments. They found music teachers were more likely to report negative attitudes and feelings regarding teaching these students if the disability required specific training.

Inclusion of exceptional learners into general education classrooms gradually replaced mainstreaming in music, art, and physical education classes. This change began shortly after *IDEA* (P.L. 101-476), one of the amendments to P.L. 94-142, was voted into law. The National Association of State Boards of Education (1992) defined inclusion as:

Inclusion...means that students attend their home school with their age and grade peers...Included students are not isolated into special classes or wings within the school. To the maximum extent possible, included students receive their in-school educational services in the general education classroom with appropriate in-class support. (p. 12) The U.S. Department of Education (1996) estimated 70% of students with special needs and disabilities were mainstreamed or included in general education classes with their non-disabled peers. The trends mentioned previously in this review of literature (lack of preservice and inservice training; exclusion from IEP process; and exclusion from placement meetings regarding exceptional learners) continued once inclusion replaced mainstreaming. Music educators were expected to continue teaching students they felt inadequately prepared to teach as inclusion gained momentum in public education.

Participants in Wilson and McCrary's research (1996) completed a pretest and posttest survey, and responses were compared to identify changes in their attitudes toward working with students with disabilities. Upon comparing the results of the pretest and posttest scores for the 18 graduate music education students enrolled in a multi-week summer course, researchers revealed teachers' comfort and willingness to work with students with special needs following the pretest. However, posttest scores showed participants' decrease in comfort and willingness to work with students with special needs. These results bolstered previous research, which music educators specified students with emotional or physical disabilities as being most difficult to include in the

music classroom with students without disabilities (Gfeller et al., 1990; Hawkins, 1991). Wilson and McCrary (1996) suggested music educators needed more training implementing adaptions if exceptional students were to be successfully included in performance-based music classes.

One researcher (Atterbury, 1998) alluded to important changes to preservice and inservice preparation of music educators to work with students with special needs. Atterbury closely replicated two previous studies (Frisque et al., 1994; Gfeller et al., 1990) and investigated mainstreaming practices among 111 Maine music teachers. Atterbury compared teacher preparation in special education in Maine was different to other states (i.e. Arizona, Iowa/Kansas). She found widespread mainstreaming throughout the state as 81% of respondents reported either some or all exceptional students mainstreamed in their music classes. She determined students with learning or intellectual disabilities were mainstreamed most frequently (93% and 75% respectively). Whereas researchers previously reported most music teachers received little to no training/coursework in special education (Frisque et al., 1994; Gfeller et al., 1990), Atterbury found 83% of respondents attended special education workshops (for college credit) or completed at least one college course and workshop. Although Atterbury suggested special education requirements in teacher preparation programs resulted in some changes in teacher beliefs regarding mainstreaming in Maine, she also discovered elements that may affect teacher beliefs on mainstreaming (i.e. involvement in IEP; placement of exceptional students in music classes based on socialization rather than musical ability) remained "untouched" (Atterbury, 1998, p. 32).

Inclusion positively affected all students as exceptional students learned both music and social skills while their non-disabled peers learned empathy. Darrow (1999) completed one of the first studies on music educators' perceptions of inclusion of students with severe disabilities

in music classrooms. She interviewed all music educators (35 in total) in a Midwestern school district (approximately 10,000 students and 24 schools) who supported full inclusion of exceptional students in general education classes. She identified the following issues as critical among participants: the need for collaboration or consultation with special educators or music therapists (75%), the need for more information about the exceptional students in their classes (60%), and the need for more time to successfully include exceptional students in their classes (50%). She also determined participants felt inclusion of exceptional students in music classes positively affected students with and without disabilities and stated "Participants believed that inclusion has made students without disabilities more understanding and accepting of others, and has made students with disabilities more a part of their peer group and more skilled socially" (Darrow, 1999, pp. 264-65).

Researchers conducted numerous attitudinal studies to determine music teachers' beliefs on mainstreaming and inclusion (several of these studies were previously discussed) shortly after the passage of *IDEA* in 1990. Although this topic grew significantly in the 1990s, few studies were completed on teacher perceptions of inclusion throughout the later part of the decade and early 2000s. Scott et al. (2007) designed their research "...to provide new *baseline* data regarding teachers' perceptions, opinions, and experiences regarding inclusion" (p. 40). They interviewed 43 teachers experienced in teaching inclusive music classrooms and reported mostly positive findings regarding inclusion, and a greater percentage of participants said they were included in IEP meetings and placement meetings for students with special needs compared to previous studies (Atterbury, 1986; Atterbury, 1998; Gavin, 1983; Gilbert & Asmus, 1981; Shephard, 1993). Many teachers approved of the support provided for inclusion of students with special needs in their music classes.

Most of the early literature in this field focused on elementary or general music teachers since participation in music ensembles was usually voluntary in middle and high schools. Sharrock (2007) surveyed 91 middle and high school choral directors and 77 special education teachers in South Carolina to determine how frequent students with mild and moderate mental disabilities were mainstreamed in choral classes. Sharrock's findings reinforced similar results from previous studies (Gfeller et al., 1990; Gilbert & Asmus, 1981) as almost 70% of choral teachers reported teaching exceptional students in their choral classes. Most respondents (both music and special education teachers) said students with special needs remained in the choral classes for the entire school year. Nearly 75% of the respondents said between one and three students with special needs were in their choral classes. Sharrock reported positive changes in placement of students with special needs in chorus classes when compared to previous studies (Atterbury, 1986; Gfeller et al., 1990; Shepard, 1993) and increased teacher participation (their opinion was considered prior to placement of students in their classes) regarding placement of students with special needs in music classes. Also, special education teachers felt chorus teachers were better prepared to work with inclusion students than the chorus teachers believed of themselves. Sharrock said special education teachers may have felt choral teachers were sufficiently fulfilling the needs of the exceptional students. However, 50% of choral teachers did not feel adequately prepared working with students with special needs, which supported previous findings (Shepard, 1993). These differences might be explained by goals and expectations of both choral and special education participants. One might surmise special education teachers focused on building of social skills for students with special needs while choral directors focused on acquisition/mastery of music skills. Although Sharrock indicated some positive changes

regarding inclusion of exceptional students in music classes, the respondents still maintained lack of preparation to work with students with special needs.

Students with physical disabilities were underrepresented in music classes as few contributions were made to this area of literature. Nabb and Balcetis (2010) examined Nebraska high school band directors' opinions regarding inclusion of students with physical disabilities in their classrooms. Fifty-five percent of respondents reported at least one student with a physical disability attended their school, and 61% of respondents reported a student's physical disability restricted their participation in music class at least one time during the teacher's career.

Respondents working at larger schools reported greater awareness of adaptive instruments for students with physical disabilities than their peers at smaller schools (81% for teachers at larger schools compared to 60% for teachers at smaller schools). A high number of potential band students did not participate in instrumental music programs in Nebraska due to ignorance of band directors regarding adaptive instruments for students with physical disabilities. Nabb and Balcetis (2010) concluded band directors needed better training and information on adaptive equipment and programs students with physical disabilities could use to participate in band classes.

Simulation activities designed to help alter attitudes toward individuals with disabilities positively affected future music educators' attitudes toward students with special needs. Colwell (2013) examined "...the impact of disability simulations on the attitudes of individuals who will be working with children with special needs in music settings and to compare these attitudes between student music therapists and preservice music educators" (p. 71). Participants included 90 music therapy majors and 97 music education majors. Results pointed to improved attitude and empathy of participants toward individuals with disabilities based on pretest and posttest

scores. No significant differences based on music major were reported, and students regularly reported this activity as more helpful than initially expected. Colwell concluded attitudes and empathy toward students with special needs could be modified or gained which was critical if music majors were to include these students in their future music classes.

As parents became more informed about their rights and their child's rights, schools tested more students for special education services, which led to more students qualifying for these services. Gilbert (2013) surveyed 458 Texas elementary music and secondary choral teachers and found increased numbers of students with autism spectrum disorder (ASD) they taught in their classes. Only 12% received undergraduate training to work with this population of students when asked what training was most beneficial to help participants work with these students. Nearly all respondents said they had received their most helpful training through district professional development or state in-service conferences/workshops. Gilbert concluded more training needed to be incorporated in undergraduate music teacher educator programs to assist teachers when teaching students with ASD.

Teachers felt less comfortable teaching students perceived as difficult to work with due to a disability, and they often did not want them in their class. Hamblin (2013) interviewed 91 specials teachers ("specials" refers to classes such as music, art, physical education, media center, and computer lab) from elementary schools in Baltimore County, MD. Respondents indicated less than positive attitudes toward inclusion of students with special needs in their classes. Hamblin (2013) said "Teachers themselves stated lack of confidence in their ability, lack of support, and the additional work that is required to meet the needs of the students with special needs" (p. 80). Respondents indicated lack of administrative support and little if no involvement in the decision making process of whether to include students with special needs in their classes.

Hamblin asked respondents to include their years of teaching experience as well as training received to work with exceptional students. Of particular interest was the amount of training teachers received when comparing years of teaching experience. Hamblin (2013) concluded:

Based on the results of this study, for teacher training and time in current assignment and total career in teaching, there is little emphasis on continuing education and training of teachers. There appeared to be little or no increase in college course work or field placement for experience with students with special needs. Training appeared to be lacking on the part of Baltimore County Public Schools to provide training and to developing an inclusive educational setting. (p. 88)

While the generalization of the findings was limited by geography, these findings were similar to previous studies (Frisque et al., 1994; Gfeller et al., 1990) regarding inclusion of exceptional learners in music classes around the country.

Most studies of music educators' attitudes regarding effectiveness of mainstreaming or inclusion were conducted in the 1990s and limited geographically. Although not a complete replication due to modifications in state laws since earlier research (Gfeller et al., 1990), VanWeelden and Whipple (2014a) completed a national survey of music educators and reported changes in music teacher perceptions. They described similar findings on the mainstreaming/inclusion of students with special needs in music classes:

...roughly the same percentage of teachers responded that students with special needs were integrated effectively in music (2011, 62%; 1990, 61%), that their needs were being met in regular music (2011, 53%; 1990, 52%), and that they were expected to participate in the same music objectives as students without special needs (2011, 63%; 1990, 62%). (VanWeelden & Whipple, 2014a, p. 155)

They noticed a decrease in the amount of respondents who felt the "...needs of students with special needs were better met in special education classes (2011, 33%; 1990, 50%)" (VanWeelden & Whipple, 2014a, p. 155). Respondents who felt students with special needs hindered progress of their peers without special needs (2011, 29%; 1990, 61%) decreased. There was a 36% decline in nonmusical goals being the main objective for students with special needs compared to 61% reported by Gfeller et al. (1990). VanWeelden and Whipple concluded respondents were more comfortable in what they believed as effective inclusion in music classrooms and adaption/modification of curriculum to fit the needs of students with special needs. Respondents with more teaching experience (greater than 25 years) felt better adept at modifying curriculum for exceptional learners compared to teachers with less experience. Finally, experienced music teachers (greater than 25 years of teaching experience) no longer supported self-contained classes for students with special needs.

Undergraduate students incorporated inclusion topics more frequently as future music educators when they completed meaningful experiences with K-12 exceptional learners (Robinson et al., 2019). Future and in-service music educators found physical disabilities were difficult to accommodate (Gfeller et al., 1990; Wilson & McCrary, 1996). Robinson et al. (2019) questioned how biased statements on students with special needs would affect future music educators' decisions to include these students in their high school performance ensembles. Participants included majors from three different areas: music education, music performance and/or composition, and music therapy. Participants stated opinions on whether they would allow students with vision or hearing loss to participate in their ensemble and which ensemble they would place these students (low task such as bottom choir or high task such as top wind ensemble). Participants made placement decisions based on photos including positive and

negative biased statements about individual students (e.g. "He has consistent timing and pulse," "She finds new pieces difficult and struggles because of this"). Participants willingly included students with vision loss in more advanced ensembles, and there was no significant difference in placement of students in advanced or beginning ensembles based on hearing loss.

Robinson et al. (2019) provided meaningful implications for music teacher preparation programs. Participants expressed concerns about their training to work with exceptional students. There were differences reported in how participants from these majors placed these students with special needs in their ensembles. Music performance and music education majors' perceptions regarding students with special needs should be considered equally. Music performance majors directly impacted future music teacher preparation when they included or did not include topics regarding working with students with special needs in methods courses.

Summary of Beliefs and Attitudes of Music Educators toward Mainstreaming/Inclusion

Music educators' perceived lack of training and support to work with exceptional learners increased as more students with special needs were mainstreamed or included in music classes with their non-disabled peers. Within five years following the passage of P.L. 94-142, researchers showed mostly favorable attitudes among music teachers toward mainstreaming. Most music teachers reported teaching exceptional learners in their classes by the early 2000s. Experts also indicated a shift from rare involvement among music teachers in the IEP process and placement of exceptional learners in music classes to increased involvement of music educators. Yet, researchers consistently reported music educators' lack of training working with students with special needs both at the preservice and in-service levels.

Music Teacher Education Programs

Colleges and universities reacted slowly to music educators' requests for better preservice training to work with students with special needs. Gilles (1978) investigated how music teacher preparation programs prepared future music educators to work with exceptional learners. Less than ten universities offered courses focusing on music in special education shortly after passage of P.L. 94-142 (Gilles, 1978). She investigated 13 participants enrolled in a seminar course focused on music for students with special needs. The participants completed a pretest at the beginning of the course and a posttest at the conclusion of the course, and results indicated increased attitudes of participants' abilities to teach students with special needs. Gilles called for necessary changes to music teacher preparation programs to better train music teachers.

Heller (1994) examined preparation of music teachers to work with students with special needs. Heller surveyed 179 music education methods' instructors from 78 colleges and universities within six Great Lakes states. She reported only 26.9% of respondents had received formal training to work with students with special needs as undergraduate music education students. Nearly 70% of respondents felt inadequately prepared to work with exceptional learners, and 55% indicated they had not received any further in-service training to work with these students. Professors who had worked with students with special needs mainstreamed in their classes reported an increased willingness to incorporate topics on special education in their undergraduate classes; the opposite was true for professors who had no prior experience with mainstreamed students in their classes. Most respondents indicated if they included mainstreaming topics in their classes, they did so by lecture (81%) or required readings (69%). Heller also stated "While some respondents indicated that field-based observations and/or experiences with special needs students were a part of the coursework, it was discouraging to

find that only 15.5% required their music education students to have actual field-based experiences with mainstreamed students" (p. 78). Although many colleges and universities required students complete a course to work with mainstreamed students, non-music education professors taught most of these courses (77.9%). Additionally, 77.4% of the colleges/universities represented indicated no future plans to change requirements for its graduates to work with mainstreamed students.

Colwell and Thompson (2000) indicated a failure among music teacher preparation programs in training undergraduate students to work with exceptional students. They randomly selected colleges and universities throughout the country offering a program leading to music education certification. Overall, 171 institutions were selected consisting of Category One research schools, regional state-funded schools, private schools, and schools recognized by the American Music Therapy Association as offering degrees and certification in music therapy. They searched the course offerings at each university and determined: (a) the existence of a course in special education for music education students, (b) whether the course was contentspecific or taught by someone in another field, and (c) whether music education majors were required to take the course or if it was an elective. Twenty-six percent (44 schools) of the schools selected failed to offer a special education course for music education majors. Colwell and Thompson established while there was often a special education course within the education department, music education majors were frequently required to take an overloaded schedule just to fit the special education course in their chosen sequence. Most of the schools offering a course in special education were non-music content courses taught by instructors from non-music fields (e.g. education department). Reasons for so few content-specific music in special education courses were because the lengthy process to add this type of course at a college or university and

lack of personnel competent to teach the subject matter. They concluded "Even though a large percentage of music education preservice programs require a course in special education, this study indicates a lack of content-specific coursework in music and special education in preserved music education programs" (2000, p. 218).

Undergraduate music educators should learn how to effectively teach exceptional learners during completion of their music teacher training program (Wheeler, 1999). Kaiser and Johnson (2000) focused on the interaction between 23 members of a college brass ensemble and 10 elementary students with hearing impairment. They used a pretest-posttest questionnaire to "...examine the subjects' perceptions regarding music for deaf students, including how prepared, comfortable, and willing they felt to provide music experiences for deaf students" (Kaiser & Johnson, 2000, p. 222). Although many of the college students felt apprehensive towards teaching students with hearing impairments, Kaiser and Johnson showed positive gains among participants' attitudes from this single interaction. They attributed these gains to a lack of experience among the college students in teaching students with hearing impairments. Subjects seemed to gain empathy and requested similar future experiences.

Hammel (2001) surveyed 202 Virginia elementary music teachers to compare current and former music teacher preparation practices. Respondents reported less experience with students with special needs during preservice field experiences than they had discussed during preservice courses. A large percentage (76%) of respondents revealed observing students with special needs between 0-5 hours during preservice field observations, and 64% revealed teaching students with special needs the same amount of time during preservice field experiences. Hammel (2001) determined how elementary music teachers with the most teaching experience indicated discussing students with special needs during their preservice music experiences fewer than

teachers with less teaching experience. Many teachers indicated frustration and feelings of inadequacy when teaching students with special needs even though changes occurred in music teacher preparation (Hammel, 2001). She stated many teachers felt incompetent when teaching students with special needs. Therefore, these teachers sought additional training beyond their undergraduate teacher preparation through in-service training, workshops, or postgraduate courses.

Although the amount of students with special needs included in elementary general music classrooms increased over time, the percentage of students with special needs participating in performance based classes at the secondary level (i.e. band, chorus, or orchestra) remained lower than participation of their non-disabled peers. Linsenmeier (2004) surveyed Ohio high schools to determine how music teacher preparation might affect rate and involvement of students with special needs in high school band and choir. Responses from 165 bands and 175 choirs was obtained, and Linsenmeier delimited the participants to 19 band and choir directors who had the highest or lowest percentage of participation among students with special needs in their ensembles. Patterns of differences among participants explained why students with special needs chose to participate or not in band or chorus at these schools. The percentage of students with special needs participating in band and chorus ensembles was much less than their non-disabled peers (band: 15.0% - general education students, 5.86% - students with special needs; choir: 15.82% - general education students, 7.9% - students with special needs). Linsenmeier noticed several differences in the groups after interviewing the band and choir directors who either had the highest or lowest percentage of students with special needs participating in their ensembles. Teachers who had more students with special needs (higher group) participating in ensembles taught more of this population of students throughout their career. The opposite was true of the

lower group (fewer participation in band and choir ensembles among students with special needs). None of the participants from either group completed a college level course on music in special education. The higher group of band and choral directors mentioned the special education teachers more than any other source when teaching students with special needs. Linsenmeier suggested band and chorus teachers with the most students with special needs participating in their ensembles valued collaboration with special education teachers at their school more than the band and chorus teachers with the least participation among students with special needs in their ensembles.

General and special educators collaborated to effectively include exceptional learners into general education classes. Shippen et al. (2005) surveyed 326 graduate and undergraduate students enrolled in exceptionalities courses at three different universities. They compared the perceptions of future educators on hostility/receptivity and anxiety/calmness regarding inclusion of students with special needs in general education settings. They administered pretests and posttests to undergraduate and graduate students enrolled in introduction survey courses in special education. Slight increases in future general educators' attitudes towards inclusion of students with special needs in general education classes were uncovered, but the shift in attitudes of future general educators was not as much as the attitudes of future special educators. Shippen et al. (2005) suggested these courses had a calming effect on future general educators. Finally, they concluded cross training and collaboration among general and special educators might benefit the field of education by producing teachers better prepared and willing to teach students with special needs.

Some colleges and universities modified their undergraduate music preparation programs by the early 2000s. Previously, music teacher education programs offered undergraduate students

little and sometimes no field experience working with students with special needs. VanWeelden and Whipple (2005) investigated undergraduate music education majors enrolled in a course titled "Teaching Secondary General Music" at a large university. Participants planned and taught music to secondary students with special needs over an entire semester. VanWeelden and Whipple hoped to gain insight on future teacher perspectives in several areas including: (a) personal comfort when teaching students with special needs in music settings and in general; (b) training to work with this population of students; and (c) willingness to offer music to future students with special needs. They administered pretests and posttests to all participants, and results suggested positive gains as "All preservice teachers' comfort in interacting with persons with these disabilities increased after the field experience" (VanWeelden & Whipple, 2005, p. 67). Participants rated their educational preparation in teaching students with special needs as higher following conclusion of this course. Finally, participants indicated greater comfort including students with special needs in their music classes following their long-term field experiences as part of the course.

VanWeelden and Whipple contributed further to this topic by examining whether field experiences impacted preservice teachers' perceptions on their educational preparation and willingness to work with students with special needs. Previously, music teachers generally supported mainstreaming/inclusion (Hawkins, 1991; Wilson & McCrary, 1996) of students with special needs in music classes, but the same cannot be said regarding music teachers' attitudes of successful implementation of mainstreaming/inclusion (Sideridis & Chandler, 1995).

VanWeelden and Whipple (2007) reported "The personal and professional attitudes of the preservice teachers within this study...became more positive after interacting with students with special needs in the general music lab experience" (p. 40). The participants' perceptions of

educational training and willingness to work with students with special needs increased following these field experiences.

Some music teacher preparation programs added field experiences to requirements of undergraduate music education majors following the publication of several articles (Hourigan 2007a; Hourigan 2007b; VanWeelden & Whipple, 2005; VanWeelden & Whipple, 2007). In one of these studies, Hourigan (2007a) offered participants a different field experience than what most other preservice music educators received when teaching students with special needs. Participants included one undergraduate student and one graduate student, and both participants worked individually with one middle school instrumental student. Both participants described personal and professional growth in their journals and interviews throughout the longitudinal study. Although participants were apprehensive about their educational preparation and readiness to work with students with special needs prior to the field experience, both described increased comfort levels when teaching exceptional students. They expressed how the field experience helped them learn to adjust curriculum to fit the needs of the individual student, and they recommended this type of field experience as beneficial to other preservice music educators.

Other researchers indicated longitudinal field experiences among preservice music educators with exceptional learners positively changed their attitudes to work with these students (Kaiser & Johnson, 2000; VanWeelden & Whipple, 2005). Participants in these studies were more comfortable teaching students with special needs and more willing to include exceptional students in future music classes following completion of long-term field experiences with students with special needs. These early studies about longitudinal field experiences in music education led to lasting changes at some music teacher preparation programs. Hourigan promoted collaboration among the participants in his phenomenological study (2007b) which

supported prior research (Hammel, 1999; Shippen et al., 2005). Participants included four undergraduate music education majors, a music teacher educator, and a cooperating elementary general music teacher. The undergraduate participants engaged in partner observations during the field experience. After interviewing the music teacher educator, Hourigan gained insight into necessary changes needed in preservice music teacher training programs. Hourigan, a parent of two children with special needs, recognized the need for change in how future music educators are trained to work with students with special needs. Although not meant to be generalized, his research helped spark the debate for change as he said, "This fieldwork experience has opened a dialogue at my university for change in the way that we prepare preservice music teachers for children with special needs" (Hourigan, 2007b, p. 184).

Music teachers consistently reported inadequate preservice preparation to work with students with emotional behavior disorders (EBDs). As music teachers reported an increase in the number of students with EBDs they instructed either in inclusive or self-contained classes, music teachers still felt ill-prepared to teach these students. Shirk (2008) interviewed 269 elementary music teachers from all 50 states to determine their preparedness to work with students with EBDs. Only 19% of the respondents felt well prepared to work with students with EBDs while approximately 80% felt either unprepared or somewhat prepared to work with these students. Participants described need for both preservice and in-service training to work with students with EBDs (92.6% of respondents desired more preservice training while 87% expressed need for more in-service training). Participants requested more training in behavior management since 75% lacked any coursework in the area. As more students diagnosed with EBDs qualified for special education services, experts indicated training of preservice music educators had not shifted to effectively meet the needs of this group of exceptional students.

Inconsistencies in how music teacher training programs prepared preservice music educators to teach students with special needs remained a relevant topic in music education. Salvador (2010) surveyed music professors nationwide to determine which universities offered and/or required undergraduate music education majors to complete music content courses in special education. Participants answered whether consistent curriculum was integrated through music education courses to prepare undergraduate music education majors to teach exceptional learners. Of the 109 responding institutions offering either doctorate or master's degrees in music education, only 29.6% required undergraduate music education majors to complete a music content course in teaching music to students with special needs. Less than 60% of respondents reported this type of content was integrated in various music education courses. Unfortunately, only 40.2% of respondents expressed their institutions prepared music education majors using a sequential approach to teaching students with special needs. Salvador discussed music teacher preparation:

Several respondents mentioned that they felt that lack of consistent, planned opportunities for undergraduate music education majors to learn about special education populations was a weakness of their program that they were trying to address, but that no one on faculty had the needed expertise. (p. 33)

Many universities failed to offer music content courses in teaching exceptional learners to its undergraduate music education majors due to lack of expertise in music education faculty members (Salvador, 2010).

Most literature in this field focused on the opinions of music education majors and excluded music performance majors' opinions regarding inclusion of students with special needs.

Inclusion topics fundamental in properly preparing future music educators to work with students with special needs were also taught by applied faculty at many colleges and universities. The preparation of all music teacher educators, rather than just music education faculty, became important since music faculty with varied backgrounds were often equally responsible for training undergraduate music education majors. Unfortunately, research in this area was nonexistent.

Continued training of music educators at the graduate level remained vital in preparing them to work with students with special needs. Davila (2013) interviewed four participants at both the beginning and end of a graduate music course on inclusion. Participants showed growth in their knowledge regarding children with disabilities and said they learned more from this one graduate course than all of their previous undergraduate courses combined. All of the participants completed only one undergraduate special education course as a requirement for initial music teacher certification. They felt better prepared to work with students with special needs following completion of this graduate course. Findings were similar to previous research (Hourigan, 2007a; VanWeelden & Whipple, 2014a) as the participants said these graduate field experiences markedly prepared them to work with students with specials needs.

More recently, researchers found teachers' perceptions regarding the effectiveness of inclusion positively changed (VanWeelden & Whipple, 2014a). These researchers partially replicated the Gfeller et al. (1990) study to compare changes over time; VanWeelden and Whipple determined music teachers felt they could better include students with special needs in their classes. They said this was possibly due to better preservice or in-service training (Colwell & Thompson, 2000; Heller, 1994; Salvador, 2010), NAfME state/national workshops, or

professional development within local school districts. They related positive changes to increased familiarity among teachers working with students with special needs.

However, VanWeelden and Whipple (2014b) surveyed music educators nationwide and determined few changes to coursework specifically designed to prepare future music educators to work with exceptional learners in comparison to previous work (Colwell & Thompson, 2000; Heller, 1994; Salvador, 2010). Few respondents completed a course specifically for music in special education. Additionally, fewer than half of these courses included field-based teaching experiences. Most teachers attended fewer than two workshops on teaching students with special needs during their careers. Teachers completed few in-service professional development opportunities to work with students with special needs within their district. Music teachers with more than 25 years of experience responded significantly different from those with far less teaching experience. Overall, music teachers with more than 25 years of experience perceived the inclusion of students with special needs in their classroom more successfully than their peers with far less teaching experience.

Increased attitudes among music educators regarding inclusion did not guarantee music teachers felt prepared to work with exceptional learners. Moss (2015) surveyed undergraduate music education majors to determine the relationship between participants' personal experiences with students with special needs and the participants' beliefs regarding their training to teach these students. While respondents felt confident in their understanding of special education laws pertaining to students with special needs, Moss concluded "...individuals may not be as prepared to modify, adapt, and implement instruction in integrated and/or self-contained settings" (2015, p. 74). Similar to findings from previous research (Colwell & Thompson, 2000; Heller, 1994; Hourigan, 2007a; Salvador, 2010; VanWeelden & Whipple, 2005; VanWeelden & Whipple,

2007), Moss determined additional courses offered to prepare future music educators to work with students with special needs remained relatively stagnant.

Commonalities expressed by music educators remained consistent throughout the review of the literature: lack of preservice and in-service preparation to work with students with special needs, exclusion in the placement and IEP process of exceptional learners, and overall lack of support from administration. More recently, Roper (2015) surveyed in-service music educators from the Southeastern part of the US. While some findings were encouraging, others were not surprising as meaningful change to music teacher preparation programs evolved slowly. Most respondents completed some type of undergraduate coursework or in-service professional development related to teaching students with special needs. She also reported "...that most expressed some level of confidence in their ability to provide those accommodations and modifications" (Roper, 2015, p. 219) for students with special needs. The coursework, while sometimes music content-specific, usually excluded fieldwork experience with students with special needs. Respondents expressed unfamiliarity with basic *IDEA* principles, which all teachers should understand due to legal ramifications. Most music educators conveyed knowledge about the IEP process; however, the majority were inconsistently included in the process while many were rarely or never included. Music teachers reported "sometimes" or "never" receiving paraprofessional support or other instructional assistance with students with special needs in their music classes.

Summary of Music Teacher Education Programs

While many universities required undergraduate music education majors complete a course in special education, most of these courses were not music content-specific (Salvador, 2010). Researchers found participation in long-term filed experiences with exceptional learners

positively affected attitudes of preservice music educators (Hourigan, 2007a; Hourigan, 2007b; VanWeelden & Whipple, 2005; VanWeelden & Whipple, 2007); yet, many institutions did not require these field experiences. VanWeelden and Whipple (2014a) reported increased music teacher beliefs regarding how affectively students with special needs were included in music classes with their non-disabled peers. They also found few changes to coursework compared to earlier research (Colwell & Thompson, 2000; Heller, 1994; Salvador, 2010), few music content-specific courses in special education (even fewer of these courses offered field-based teaching experiences), and few in-service professional development opportunities offered by local school districts.

In-service Music Educator Training

The final area of this review of literature includes in-service training of music educators to work with students with special needs. Many music educators received little or no formal training to work with students with special needs prior to entering the field. For some of these music educators, they quickly felt unprepared to teach exceptional students; thus, in-service training provided their only option to help reach this population of students they were required by law to teach.

The body of research on the effects of in-service training on teachers' attitudes toward mainstreaming/inclusion of students with special needs in general education classrooms was limited compared to the previous areas in this review of literature. Larivee (1981) studied 941 New England K-12 regular classroom teachers to determine "...the impact of in-service training intensity on the regular classroom teacher's attitude toward the mainstreaming process" (p. 36). A moderate training group met monthly after school for two hours while the intensive training group began with daily four hour meetings during a summer workshop over a six-week period,

followed by consistent seminars, planning, and classroom visits throughout the school year. Participants from the intensive training group showed the most growth in positive attitudes toward mainstreaming of students with special needs in general education classrooms. Larivee suggested this was due to more exposure to exceptional students as well as collaboration with support staff including special education personnel throughout the yearlong process. Attitudes of in-service teachers toward mainstreaming of students with special needs was positively changed through intensive in-service training. Unfortunately, most schools or districts failed to provide this type of intensive in-service professional development to music educators.

VanWeelden and Whipple (2014b) investigated music educators' perceptions of available support for inclusion of students with special needs. Participants included over 1,000 music educators from all 50 states, and researchers based their survey on a previous instrument (Gfeller et al., 1990). VanWeelden and Whipple identified "...slight increases in course offerings and inservice attendance" (p. 33) in comparison to the Gfeller et al. work, but the amount of in-service trainings offered to music educators remained sparse. Almost 50% of respondents indicated no in-service training offered them on teaching students with special needs while 30% said they were provided one to two in-services. Of the 606 teachers who were provided one or two inservices on teaching students with special needs, only 17% reported music content-specific inservices and 64% were only provided in-services when the teachers asked. Most discouraging was "The majority of the respondents (59%) disagreed or strongly disagreed the in-services prepared them to work with students with disabilities in music" (VanWeelden & Whipple, 2014b, p. 39). They concluded music teachers were provided less than adequate support from administration and districts regarding teaching exceptional learners.

Many music educators said their only option to increase their ability to teach students with special needs was through attendance at state music educators association (MEA) conferences. VanWeelden and Meehan (2016) collected all available conference programs from all states during 2004-2013 to determine which states offered special education workshops at Music Educator Association (MEA) conferences. During this period, only 23 states offered at least one music and special education workshop although 300 music content and special education workshops were offered overall. Furthermore, 10 states failed to include any music and special education workshops in the conference programs. Most of the workshops focused on elementary general music or Autism. VanWeelden and Meehan declared "...very few workshops specific to working with children with disabilities in band, choir, or orchestra" (2016, p. 9) were offered at MEA conferences. They determined few states included a special education personnel serving on their MEA leadership board. This may justify why some states provided music and special education workshops at their MEA conferences more effectively than other states. Nevertheless, most states sparingly offered music and special education workshops at MEA conferences.

Summary of In-service Music Educator Training

Researchers (Larivee, 1981; VanWeelden & Meehan, 2016; VanWeelden & Whipple, 2014b) called attention to the importance of training preservice music educators to work with students with special needs. Intensive professional development positively affected the attitudes of in-service music educators toward students with special needs; yet, experts reported few local school districts offered these to music educators. Researchers found few local school districts offered more than two in-services to music educators, and music educators said most of these professional development opportunities were not music content-specific. Finally, many states

failed to support music educators by including any professional development for music in special education in their state MEA conferences. The failure of local school districts and MEA conferences to provide frequent and meaningful music content-specific in-service training, coupled with inconsistent preservice training, resulted in music educators' inadequate preparation to teach students with special needs.

Summary of Review of Literature

Various studies on the preparation of music educators to work with students with special needs revealed how music teacher attitudes and preservice/in-service training shifted since the passage of P.L. 94-142. Researchers determined favorable attitudes of music educators regarding the mainstreaming/inclusion of students with special needs in their music classrooms. Music educators reported lack of preparation to work with exceptional learners and lack of support from administration (e.g. involvement of music educators in IEP process and placement of students in music classes). Researchers in some longitudinal qualitative studies examined the effect of field experiences on the attitudes of preservice music educators. While the results were encouraging, experts revealed many music teacher education programs did not offer or require undergraduate music education majors complete field experiences (even fewer field experiences were contentspecific). In several studies (Colwell & Thompson, 2000; Heller, 1994; Salvador, 2010), researchers revealed inconsistent preparation of future music educators to work with students with special needs and few music in special education courses offered. VanWeelden and Whipple (2014b) found few changes to course offerings compared to previous studies and showed few music content-specific in-services offered to train music educators to work with exceptional learners.

The literature revealed music educators supported inclusion of students with special needs in music classrooms; yet, researchers reported few changes to coursework designed to prepare future music educators to work with exceptional learners. Deficient professional development offered by local school districts and MEA state conferences hampered many music educators' abilities to effectively teach students with special needs. I found only three studies examining how future music educators were trained to work with students with special needs. Heller (1994) examined this topic by focusing on experiences and perspectives of music teacher educators while Colwell and Thompson (2000) and Salvador (2010) focused on university requirements for students. Undergraduate music education majors who had meaningful experiences with students with special needs during their preservice training were more likely to incorporate inclusion topics as future music educators (Robinson et al., 2019). While researchers consistently revealed increased music teacher perceptions regarding mainstreaming/inclusion, they also reported lack of adequate training of music educators, few changes made to courses offered, and no recent studies completed in this field.

Chapter III

Methods and Procedures

Participants

Participants in the current study were delimited to NAfME-affiliated college or university music education professors in the United States. Music teacher educators (n = 73) from 31 states responded from the NAfME membership list. A survey was sent to 1,054 possible participants, and 82 individuals completed the survey. The overall response rate was 7.78%. Nine participants began but did not complete the survey, therefore, their data were not included. Based on the population size (N = 1,054) of my survey, I needed a sample size of at least 282 participants to make generalizations representative of the target population with a 95% confidence level (Qualtrics^{XM}, 2023). Therefore, I was unable to make generalizations regarding the sample size, and trends observed were limited to the participants. Participants (n = 73) represented institutions with various enrollment sizes and diverse objectives within music departments. Institutions included schools of music comprised of hundreds of music majors to small music departments comprised of only a few music majors.

Internal Review, Peer Review, and Pilot Study

I subjected my initial survey instrument to internal review, peer review, and pilot test to check for content and face validity. First, I emailed the survey to my committee members who provided expert feedback. I made several modifications prior to peer review of the survey instrument after receiving these responses. Next, I requested additional feedback from several Auburn graduate students and determined no changes were needed prior to emailing the pilot survey link. I used Qualtrics^{XM} (n.d.) software to send questionnaires to these participants and collect anonymous data via email. The pilot test (Appendix D) was sent to experts and peers to

focus on face validity and determine if the Qualtrics^{XM} (n.d.) software was collecting and reporting data accurately when exported to *Statistical Package for the Social Sciences* (SPSS) version 26 software. I sent out the questionnaire to participants including music education graduate students at Auburn University, several K-12 public school music educators, numerous Auburn University Music faculty, and music education faculty from various colleges and universities. I emailed an anonymous Qualtrics^{XM} (n.d.) survey link to 62 individuals and asked them to provide feedback on the technical aspects of the instrument. After an initial low response rate for the pilot test, I employed snowball sampling and recruited retired university music education faculty members to participate to avoid contaminating the applicant pool for my study. Seventeen of the 34 responses to the pilot test provided usable data while the remaining 17 had no university teaching experience or failed to complete the survey. I only used data from the pilot test to report validity of the survey instrument. The remaining data were not used in the current study or any future research.

Questionnaire

Instrument Development

I developed the survey to gather quantitative data because the "...survey technique is the most effective method of data gathering for descriptive survey studies and is used to secure information from varied and widely scattered sources" (Good & Scates, 1954, p. 606). Initially, my questionnaire closely resembled Heller's survey instrument consisting of 52 questions. After Heller granted me permission to use her questionnaire as part of my research, I designed an instrument consisting of some intact questions from her original survey while reformatting or omitting some questions. The Qualtrics^{XM} (n.d.) survey used for internal/peer review and the pilot study consisted of 38 questions. Although I made numerous changes to the questionnaire

during the instrument development, overreliance on the Heller questionnaire limited my study by implying a replication of her study. I made the following changes to the survey based on pilot study participant feedback and guidance from committee members in order to shift away from Heller's research design:

- Participants were chosen from the NAfME state membership lists in all 50 states
 (participants for the internal/peer review and pilot study were chosen from lists provided
 by the National Association of Schools of Music and the College Music Society's
 Directories of Music Faculties in Colleges and Universities).
- Removed all questions related to program evaluation (Questions 19, 28-37).
- Several questions revised or reformatted for clarity and accuracy.
- Questions not supported by the literature were removed (e.g. gender of participants; type of college/university – public or private)
- Addition of progress bar

Survey Instrument

The Qualtrics^{XM} (n.d.) survey instrument consisted of 23 total items including 18 multiple-choice questions and five short written responses. Questions were grouped into the following categories: (a) demographic information including title held, location and size of university, years of collegiate teaching, etc.; (b) professional experience at K-12 level; (c) personal training to work with students with special needs; (d) college teaching responsibilities/course content and SPED topics; and (e) proposed changes for preparing preservice music teachers to work with students with special needs. There was no participant identifying information in the final survey instrument.

Protection of Human Rights

The proposal for this dissertation was submitted for exempt review to the Auburn University Institutional Review Board (IRB) on September 4, 2020 and final approval was granted on 11/17/2020. The IRB also required all researchers complete appropriate CITI Program training prior to data collection to protect the rights and welfare of human research participants. I completed all CITI Program training prior to contacting possible participants and data collection. All of the participants' responses remained anonymous.

Procedures

I submitted a proposal for a research survey to the NAfME Research Survey Assistance program to obtain representation from all 50 states. This program assists those with legitimate research interests by collecting data from NAfME members, which may benefit ongoing research projects. The program does not provide email addresses of participants to the researcher; rather, NAfME distributes emails on behalf of an individual or institution. The NAfME Research Survey order form (Appendix E), IRB Approval (Appendix B), researcher information (name, email, NAfME ID number, phone number, institution affiliation, and professional status), and content information regarding the study were submitted to NAfME's Society for Research in Music Education Executive Committee for consideration. I used Qualtrics^{XM} (n.d.), an online survey platform, to administer an anonymous questionnaire link to participants and collect data. I never had direct contact with any participants since I used NAfME's Research Survey Assistance program. NAfME emailed all participants an information letter, which was used as documentation of consent. This email also contained the anonymous Qualtrics^{XM} (n.d.) survey link. Participants were instructed that by clicking on the link, they were acknowledging their agreement to participate in the study. They also were instructed they could withdraw their

participation by closing their browser window at any time prior to hitting the final *Continue* button. I identified the following criteria for sending out the emails: All 50 states, teacher education (teaching area), and college or university teaching level. I requested the following services: email transmitted to no more than 5,000 members, two reminders emailed to non-responders, and a rush order (NAfME guaranteed to send initial email in less than five business days). The initial email was sent on November 24, 2020, followed by a reminder sent one week later, on December 1, 2020, and a final reminder sent the following week, on January 20, 2021. The deadline to receive all completed surveys was February 5, 2021.

Data Analysis

Data from the survey were compiled and exported from Qualtrics^{XM} (n.d.) to SPSS. Due to the descriptive nature of the study, I collected mostly nominal data and reported using descriptive statistics (frequencies and percentages). Data for all research questions were analyzed using descriptive statistics (frequencies and percentages), and data for RQ2A were analyzed using a Spearman correlation. I recoded two short answer questions from the survey (#22 and #23) into categorical variables and analyzed the data using descriptive statistics (frequencies and percentages). I employed peer examination of the data from these two questions for data verification (Creswell, 2014). Table 1 includes research questions, the relationship between survey items and research questions, and specific data analysis procedures for each research question.

Table 1
Summary of Research Questions, Survey Items, and Data Analysis Procedures

Research Questions	Survey Items Addressing Question	Data Analysis Procedures
RQ1. What are music teacher	6-14	Frequencies and
educators' attitudes about their	0 1 1	percentages
professional preparation for		percentages
including students with special		
needs in music courses?		
RQ2A. How do music education	15-20	Frequencies and
professors prepare preservice music		percentages
educators to work with students		Spearman correlation
with special needs?		coefficient ran based on
RQ2B. Does this preparation vary	1, 3, 6-10	data collection
by professional title, number of		
years of university teaching		
experience, or previous K-12		
teaching experience with students		
with special needs?		
RQ2C. Does this preparation vary	2, 4-5	
by institutional characteristics		
including: location of		
college/university, enrollment size		
of college/university, or size of		
music department?		
RQ3. What changes, if any, are	21-23	 Frequencies and
music education professors		percentages
considering to improve how they		
prepare undergraduate music		
education majors to work with		
inclusion students with special		
needs?		

Note. Post hoc were reported when necessary.

Limitations

- Survey respondents may not be representative of the overall population because individuals may have chosen to respond based on their interest in the topic.
- The low response rate of 7.78% was possibly depressed due to COVID-19 pandemic, as educators were required to manage numerous new responsibilities (Marshall, 2022). This prevented generalizations of the findings for this study.

Delimitations

All respondents were limited to current NAfME members who listed teacher education
 (teacher area) and college/university (teaching level) in their membership information.
 NAfME estimates nearly 50% of all music educators in the US are members, and
 NAfME membership offers a broad national cross-section of music teacher educators.

Assumptions

The purpose of this study was and will continue to be an important topic in music teacher education. I assumed participants responded truthfully to items on the questionnaire. Although it is possible some participants were not truthful in their responses, participants gained nothing by providing incorrect or untruthful answers. Therefore, I assumed participants answered truthfully to the best of their ability.

Chapter IV

Results

The purpose of this study was to examine how university music faculty trained future music teachers to work with students with special needs. I used Qualtrics^{XM} (n.d.) software to construct a questionnaire and the NAfME Research Survey Assistance program to anonymously administer the questionnaire to possible participants. There were 1,054 potential participants for this study and 82 responses were received. Nine responses were started but not completed (less than 50% completion of the questionnaire). I deleted these nine responses from the data analysis yielding 73 usable responses (n = 73). Although the intent was to survey music teacher educators nationwide, low response rates (possibly due to the COVID-19 pandemic) prevented any generalizations to a larger population (Qualtrics^{XM}, 2023).

Music Teacher Educator Demographics

Participants answered 10 questions to gather demographic data regarding the participants' university teaching experience and the demographics of the current university where they teach. Table 2 shows what title the participants held upon completion of this questionnaire. A plurality of participants indicated they were assistant professors (42.5%) while 17.8% were associate professors, 16.4% were professors, and 15.1% were instructors. The remaining participants (less than 10%) indicated they were either a lecturer, visiting faculty, or teaching assistant. Table 2 also shows the region where participants were teaching. Many states were not represented upon initial inspection of the results. Although generalizations from this study were limited due to low response rate, some variables were recoded in SPSS to look for trends. I recoded several variables in SPSS so I could treat the data differently but still maintain the old data should I need to make any further modifications. Data from open-ended survey questions 2, 3, 7, 18a, 22, and 23 were recoded to create categorical variables in order to look for possible trends in the

different groups. Participant locations from survey question 2 were recoded according to the NAfME federated state association regions. A plurality indicated they taught in the Southern NAfME region (32.9%) followed by the North Central (21.9%), Eastern (15.1%) and Southwestern (13.7%). The Northwest and Western NAfME regions each accounted for 8.2% of total participants.

Most participants indicated they had taught 0-5 years (42.5%) or 6-10 years (28.8%). Only 28.7% of participants had taught more than 10 years. Refer to Table 2 to see how many years the participants have taught college/university level music education or methods courses. Most participants indicated either teaching at a large university of more than 20,000 (34.2%) or a much smaller university with 1,001 to 3,000 students (23.3%). Interestingly, the most participants indicated there were either fewer than 20 undergraduate music education majors (20.5%) or more than 60 (37.0%). Table 2 also shows the total number of undergraduates enrolled at the participants' college/university and the number of undergraduate music education majors enrolled.

 Table 2

 University Teaching Experience and University Demographics

Variable	n	%
Title Held		
Professor	12	16.4
Associate Professor	13	17.8
Assistant Professor	31	42.5
Instructor	11	15.1
Lecturer	2	2.7
Visiting Faculty	3	4.1
Teaching Assistant	1	1.4

Note. N = 73

Table 2 (continued)

Variable	n	%
NAfME Region		
Southern	24	32.9
Eastern	11	15.1
North Central	16	21.9
Northwest	6	8.2
Western	6	8.2
Southwestern	10	13.7
Years Taught at University Level		
0-5 Years	31	42.5
6-10 Years	21	28.8
11-15 Years	3	4.1
16-20 Years	5	6.8
21-25 Years	7	9.6
26-40 Years	6	8.2
Undergraduates at University		
fewer than 1,000	5	6.8
1,001 to 3,000	17	23.3
3,001 to 5,000	11	15.1
5,001 to 10,000	4	5.5
10,001 to 20,000	11	15.1
more than 20,000	25	34.2
Undergraduate Music Education Majors		
fewer than 20	15	20.5
20-29	7	9.6
30-39	9	12.3
40-49	4	5.5
50-59	7	9.6
more than 60	27	37.0
not sure	4	5.5

Note. N = 73.

Originally, I intended this study to be a partial replication of a previous study (Heller, 1994). After careful consideration, I determined a replication would limit what I wanted to accomplish from the current study. Previously, Heller examined the differences between her respondents based on their K-12 teaching experience (public or private). Very few of the participants in this study indicated experience teaching in a private school system (2.7%). Therefore, I chose not to pursue any differences in participants' responses based on their type of K-12 teaching experience. Table 3 shows what type of K-12 school system the participants were employed at prior to teaching at the college/university level. Interestingly, 9.6% indicated no K-12 teaching experience. Table 3 also shows the participants' number of years teaching in K-12 schools and the grade levels they taught. Most respondents (65.3%) indicated they taught 10 years or less in K-12 schools. More participants (76.7%) indicated some middle school experience (6-8 grade) than any other grade levels. Almost half (49.6%) taught elementary general music. Most participants (87.7%) taught students with special needs while either the remaining participants did not or they did not have any K-12 teaching experience. Refer to Table 3 to see what teaching areas the participants taught in K-12 schools and whether participants taught students with special needs during that time.

Table 3 *K-12 Teaching Experience*

Variable	n	%
Type of K-12 System		
public	51	69.9
private	2	2.7
both	13	17.8
no K-12 experience	7	9.6

Note. N = 73. Percentages on some variables (grade levels taught and areas taught) do not add up to 100% as respondents could "mark all that apply."

Table 3 (continued)

Variable	n	%
Years of Experience		
0-5 Years	26	35.6
6-10 Years	21	28.8
11-15 Years	13	17.8
16-40 Years	12	16.4
Missing	1	1.4
Grade Levels Taught		
K-2	35	47.9
3-5	42	57.5
6-8	56	76.7
9-12	44	60.3
Other	2	2.7
No experience	7	9.6
Areas Taught		
Elementary General Music	36	49.3
Elementary Choral Music	22	30.1
Elementary Instrumental Music	19	26.0
Middle/Junior High General Music	27	37.0
Middle/Junior High Choral Music	23	31.5
Middle/Junior High Instrumental Music	28	38.4
High School General Music and/or Music	19	26.0
Theory and/or Music Technology		
High School Choral Music	25	34.2
High School Instrumental Music	24	32.9
Other	2	2.7
No Experience	7	9.6
Experience with Students with Special Needs		
Yes	64	87.7
No	1	1.4
Not Sure	1	1.4
No K-12 Experience	7	9.6

Note. N = 73. Percentages on some variables (grade levels taught and areas taught) do not add up to 100% as respondents could "mark all that apply."

Research Question 1

What are music teacher educators' attitudes about their professional preparation for including students with special needs in music courses?

Descriptive statistics were calculated to answer the first research question, measuring how music teacher educators were trained to work with students with special needs and music teacher educators' perceptions regarding this training. Participants were asked which type of training they received to work with students with special needs in their undergraduate program and to "mark all that apply." Fifteen of the participants (20.5%) reported receiving no training at all in working with students with special needs. A plurality of participants (41.1%) completed a SPED course taught by an instructor outside of the music department. Twenty participants attended a conference addressing this topic during their undergraduate training. See Table 4 for all descriptive statistics regarding types of undergraduate training the participants received.

Table 4Participant Undergraduate Training – Students with Special Needs

Participant SPED Undergraduate Training	n	%
No training	15	20.5
SPED course outside music dept.	30	41.1
SPED course in music dept.	11	15.1
Lecture/ demonstration in music ed. course	18	24.7
Field-based observation with students with	9	12.3
special needs – non-music setting		
Music field-based observation with students	15	20.5
with special needs – music setting		
Field-based experience (active participation)	6	8.2
with students with special needs – non-music setting		
Field-based experience (active participation)	15	20.5
with students with special needs – music setting		
Attended conference sessions addressing this topic	20	27.4

Note. Respondents could "mark all that apply."

Participants rated how adequately their teacher training institution prepared them to work with students with special needs using a five-point Likert scale (1 = no preparation, 5 = highly adequate). A Shapiro-Wilk test determined if the data from the Likert scale were normally distributed. Since the data were not normally distributed (W = .833, p < .001), results from the Likert scale were treated as ordinal data. Most participants (50.7%) indicated less than adequate undergraduate SPED training while 23.3% indicated no preparation at all. Only 24.7% of participants indicated their undergraduate training to work with students with special needs was adequate. Table 5 shows the descriptive statistics for the Likert scale.

Table 5Perception of Undergraduate SPED Training

Perception of Training	n	%
No preparation	17	23.3
Less than adequate	37	50.7
Adequate	18	24.7
More than adequate	1	1.4
Total	73	100.0

Participants were asked to "mark all that apply" which type of post-undergraduate training they completed working with students with special needs. A slight majority of participants (50.7%) indicated completing a music and SPED workshop, 30.1% completed a university course as part of an advanced degree, and 27.4% completed a SPED workshop. See Table 6 for all descriptive statistics related to post-undergraduate SPED training.

Table 6Additional Post-Undergraduate SPED Training

Post-Undergraduate Training	n	%
None	13	17.8
University course	22	30.1
SPED workshop	20	27.4
Music and SPED workshop	37	50.7
SPED In-service	19	26.0
Music and SPED In-service	18	24.7
K-12 school district observations/ field-experiences/ training	15	20.5
Other	12	16.4

Note. Respondents could "mark all that apply."

Participants rated how adequately their post-undergraduate training prepared them to work with students with special needs using a five-point Likert scale (1 = no preparation, 5 = highly adequate). A Shapiro-Wilk test determined if the data from the Likert scale were normally distributed. Since the data were not normally distributed (W = .878, p < .001), results from the Likert scale were treated as ordinal data. Nearly half the participants (64.3%) indicated post-undergraduate SPED training as being adequate or greater while 17.8% said their training was less than adequate. Interestingly, 16.4% of participants did not receive any additional post-undergraduate SPED training. Table 7 shows the descriptive statistics regarding participants' perception of post-undergraduate SPED training.

Table 7Perception of Post-Undergraduate SPED Training

Perception of Training	n	%
No additional training received	12	16.4
Less than adequate	13	17.8
Adequate	35	47.9
More than adequate	7	9.6
Highly adequate	5	6.8
Missing	1	1.4
Total	73	100.0

I performed a crosstabulation to show responses across both Likert scale items. Overall, participants' perceptions of SPED training increased when comparing undergraduate and post-undergraduate training. While 16 participants received no undergraduate preparation working with students with special needs, the number decreased to 12 participants who did not received post-undergraduate training. Thirty-seven participants indicated less than adequate undergraduate training, but the number decreased to 13 participants who indicated less than adequate post-undergraduate training. Nineteen participants indicated at least adequate perceptions regarding their undergraduate SPED training. The number increased to 47 participants reporting at least adequate post-undergraduate SPED training. Table 8 shows the crosstabulation comparison of the two Likert scale items of undergraduate and post-undergraduate SPED training.

Table 8Crosstabulation of Adequacy of Undergraduate SPED Preparation and Professional SPED Preparation

Variable	No Additional Training Received	Less than Adequate	Adequate	More than Adequate	Highly Adequate
Undergraduate	16	37	18	1	0
Preparation					
Professional	12	13	35	7	5
Preparation					

Note. N = 73.

Research Question 2A

How do music education professors prepare preservice music educators to work with students with special needs?

Descriptive statistics were calculated to answer RQ2A to determine the strength and nature of the correlation between music methods and courses taught. The average participant taught slightly over two undergraduate music methods courses (M = 2.33, SD = 1.56); however, seven participants reported not teaching any of these courses. Participants also averaged teaching 1.56 courses (SD = 1.30) including SPED topics. They also indicated how many clock hours they devoted to teaching SPED topics for these courses during the term. See Table 9 for an overview of the undergraduate music courses taught by the participants. Notice 54 participants taught at least one course including SPED topics, 33 participants taught at least two courses including SPED topics, 15 participants taught at least three courses, etc. Most participants indicated teaching elementary general methods (46.6%) followed by introductory to music education methods (39.7%), secondary choral/vocal methods (32.9%), and secondary instrumental methods (30.1%). See Table 10 for the descriptive statistics regarding types of undergraduate music methods courses taught.

Table 9Undergraduate Music Course Overview

Variable	n	M	SD	Range
Methods courses taught	73	2.33	1.56	9
Courses w/ SPED Topics	73	1.56	1.30	5
Clock hours ^a	54	8.11	11.98	44

^a Fifty-four individuals indicated they teach at least one course where they incorporate SPED topics.

Table 10Types of Undergraduate Music Methods Courses Taught

Music Methods Courses Taught	n	%
None	1	1.4
Introductory music education methods	29	39.7
General methods for all majors	16	21.9
Pre-school methods	14	19.2
Elementary general methods	34	46.6
Elementary choral methods	12	16.4
Elementary instrumental methods	12	16.4
Middle/junior high general methods	20	27.4
Middle/junior high choral methods	15	20.5
Middle/junior high instrumental methods	17	23.3
Secondary general methods	21	28.8
Secondary choral/vocal methods	24	32.9
Secondary instrumental methods	22	30.1
Music methods for special populations	21	28.8
Conducting	15	20.5
Class instruments	20	27.4
Other	5	6.8

Note. Respondents could "mark all that apply."

Participants indicated the courses they taught for undergraduate music education majors addressed teaching students with special needs. Overall, participants taught fewer music methods

courses including SPED topics (M = 1.56, SD = 1.30) when compared to all music methods courses taught.

I conducted a Spearman correlation to determine if there was a correlation between music methods courses taught by the participants how many of these courses addressed teaching students with special needs. A Spearman correlation was calculated since data were not normally distributed for both variables (Cronk, 2016). There was a moderate, positive, monotonic correlation observed between the variables (r(71) = .62, p < .001, two-tailed). As participants taught more undergraduate music methods courses, they were more likely to incorporate SPED topics into their courses. See Table 11 for results regarding the Spearman correlation analysis.

Table 11

Spearman Correlation, Undergraduate Music Methods Courses Taught and Incorporation of SPED Topics in Undergraduate Music Methods Courses

Item		Music Methods Courses	Incorporation of SPED Topics
Methods Courses	Spearman Correlation	1	.62
	Sig. (2-tailed)		<.001
	N		73
SPED Topics	Spearman Correlation	.62	1
	Sig. (2-tailed)	<.001	
	N	73	73

Note. Correlation is significant at the 0.01 level (2-tailed).

Participants were instructed to list the names of the undergraduate courses they taught in their program addressing teaching students with special needs. I specifically instructed them to include the title of the course rather than course letters or numbers. I created categorical variables based on all course titles (categories included elementary music, secondary music, music methods, music for exceptional learners, music pedagogy and assessment, and student teaching). I deleted responses including only course letters/numbers from the analysis, as I was unable to

determine which category these courses represented. Most participants (93.2%) taught music methods courses (instrumental methods, vocal methods, general music methods, conducting) followed by elementary music (23.3%) and secondary music (17.8%). See Table 12 for descriptive statistics regarding types of undergraduate music methods courses taught addressing teaching students with special needs. Participants also indicated the number of clock hours devoted to each of the courses they taught. Fifty-four participants (M = 8.11, SD = 11.98) taught at least one music methods course addressing teaching students with special needs followed by 33 participants (M = 6.38, SD = 10.94) who taught at least two music methods courses addressing SPED topics and 15 participants (M = 6.93, SD = 12.10) who taught at least three music methods courses addressing SPED topics.

Table 12

Types of Undergraduate Music Methods Courses Taught Addressing Teaching Inclusion/
Students with Special Needs

Types of Courses Taught	n	%
Elementary music	17	23.3
Secondary music	13	17.8
Music methods	68	93.2
Music for exceptional learners	6	8.2
Music pedagogy/assessment	4	5.5
Student teaching	4	5.5

Note. Respondents could "mark all that apply."

Participants answered how they incorporated the topic of educating inclusion/students with special needs in their undergraduate music education courses. The majority indicated personal lectures (78.1%) to address SPED topics, followed by required readings (68.5%), digital media (45.2%), and field-based observations/experiences of inclusion/students with special needs (42.5%). Eleven percent did not incorporate this topic into their undergraduate music

education courses. See Table 13 for descriptive statistics regarding incorporation of SPED topics into undergraduate music education courses.

Table 13

Incorporation of SPED Topics into Undergraduate Music Education Courses

Method of SPED Incorporation	n	%
None	8	11.0
Personal lectures	57	78.1
Guest lectures	23	31.5
Digital media	33	45.2
Required readings	50	68.5
Classroom demonstration of techniques	29	39.7
Field-based observations/experiences of inclusion/students with special needs	31	42.5
Other	5	6.8

Note. Respondents could "mark all that apply."

Previous researchers found undergraduate music education majors who completed field-based observations/experiences with inclusion/students with special needs in regular music settings were more likely to incorporate these topics as professional educators (Robinson et al., 2019). Therefore, I asked participants what types of field-based observations/experiences they required their students to complete. I defined field-based experiences as active participation with students whereas field-based observations did not include active participation. The highest percentage (20.5%) of participants required their students to complete field-based observations of inclusion/students with special needs in music education settings followed by field-based experience (active participation) with inclusion/students with special needs in music education settings (19.2%). Interestingly, over a third of participants (35.6%) did not require their students to complete field-based observations or experiences. It is important to recognize that participants do not always control whether they can require field-based observations/experiences of their students as this might be determined by their department of music or additional university

department. See Table 14 for descriptive statistics regarding types of field-based observations/experiences the participants require their students to complete.

Table 14Types of Field-based Observations/Experiences Required

n	%
1	1.4
15	20.5
1	1.4
14	19.2
14	19.2
26	35.6
2	2.7
	1 14 14 26

Note. N = 73.

Research Question 2B

Does this preparation vary by professional title, number of years of university teaching experience, or previous K-12 teaching experience with students with special needs?

Participants were asked how they incorporated the topic of educating students with special needs into their undergraduate courses for music education majors. They were also instructed to "mark all that apply." Participants used personal lectures (n = 57) most frequently to incorporate SPED topics into their undergraduate music courses, followed by required readings (n = 50), digital media (n = 33), field observations (n = 31), classroom demonstrations (n = 29), and guest lectures (n = 23). Eight participants indicated they did not incorporate SPED topics into their music education undergraduate courses. When comparing these variables, 91.7% of professors indicated using personal lectures, followed by 84.6% of associate professors, and

80.6% of assistant professors. The next most frequently used method to incorporate SPED topics was required readings as 77.4% of assistant professors utilized the method, 75.0% of professors, and 61.5% of associate professors. Furthermore, 54.8% of assistant professors used digital media to incorporate SPED topics, followed by 53.8% of associate professors, and 50.0% of professors. In regards to field observations, 61.5% of associate professors used this method to incorporate SPED topics, followed by 58.3% of professors, and 41.9% of assistant professors.

Descriptive statistics were calculated to determine whether incorporation of SPED topics into music education undergraduate courses varied by years taught at the university level. When comparing these variables, 76.2% of participants with 6-10 years of experience indicated using personal lectures, followed by 74.2% of participants with 0-5 years of experience, and 85.7% of participants with 20-25 years of experience. The next most frequently used method to incorporate SPED topics was required readings as 85.7% of participants with 20-25 years of experience utilized the method, followed by 64.5% of participants with 0-5 years of experience, and 61.9% of participants with 6-10 years of experience. Furthermore, 61.9% of participants with 6-10 years of experience used digital media to incorporate SPED topics, followed by 35.5% of participants with 0-5 years of experience. In regards to field observations, 57.1% of participants with 20-25 years of experience used this method to incorporate SPED topics, followed by 38.7% of participants with 0-5 years of experience, and 38.1% of participants with 6-10 years of experience.

When comparing years of K-12 teaching experience to method of incorporating SPED topics into music education undergraduate courses, 90.5% of participants with 6-10 years of experience indicated using personal lectures, followed by 84.6% of participants with 11-15 years of experience, and 83.3% of participants with 16-40 years of experience, and 61.5% of

participants with 0-5 years of experience. The next most frequently used method to incorporate SPED topics was required readings as 84.6% of participants with 11-15 years of experience utilized the method, followed by 81.0% of participants with 6-10 years of experience, 66.7% of participants with 16-40 years of experience, and 50.0% of participants with 0-5 years of experience. Furthermore, 66.7% of participants with 16-40 years of experience used digital media to incorporate SPED topics, followed by 57.1% of participants with 6-10 years of experience, 38.5% of participants with 0-5 years of experience, and 23.1% of participants with 11-15 years of experience. In regards to field observations, 66.6% of participants with 16-40 years of experience used this method to incorporate SPED topics, followed by 38.5% of participants with 0-5 and 11-15 years of experience, and 38.1% of participants with 6-10 years of experience. See Table 15 for descriptive statistics showing how incorporation of SPED topics into music education undergraduate courses varied by participant's title, university teaching experience, and K-12 teaching experience.

Table 15Method of SPED Topic Incorporation and Teaching Experience

				1		_					Jndergraduate		E: 116'			
	N	one		sonal	Guest I	Lectures	Digita	l Media	1	uired	Classr		Field Obs	ervations	\mathcal{O}	ther
			Lectures						Readings		Demonstrations					
Variable	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Title Held																
Professor	1	8.3	11	91.7	2	16.7	6	50.0	9	75.0	7	58.3	7	58.3	1	8.3
Associate	1	7.7	11	84.6	6	46.2	7	53.8	8	61.5	4	30.8	8	61.5	2	15.4
Professor																
Assistant	3	9.7	25	80.6	13	41.9	17	54.8	24	77.4	13	41.9	13	41.9	2	6.5
Professor																
Instructor	1	9.1	6	54.5	1	9.1	2	18.2	5	45.5	4	36.4	2	18.2	0	0
Lecturer	0	0	2	100.0	0	0	1	50.0	2	100.0	0	0	0	0	0	0
Visiting	1	33.3	2	66.7	1	33.3	0	0	2	66.7	1	33.3	1	33.3	0	0
Faculty																
Teaching	1	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Assistant																
University Teach	ing Exper	ience														
0-5	5	16.1	23	74.2	8	25.8	11	35.5	20	64.5	10	32.3	12	38.7	1	3.2
6-10	2	9.5	16	76.2	10	47.6	13	61.9	13	61.9	7	33.3	8	38.1	1	4.8
11-15	0	0.0	3	100.0	1	33.3	2	66.7	3	100.0	2	66.7	2	66.7	1	33.3
16-20	0	0.0	4	80.0	1	20.0	1	20.0	4	80.0	2	40.0	2	40.0	1	20.0
20-25	1	14.3	6	85.7	2	28.6	3	42.9	6	85.7	5	71.4	4	57.1	1	14.3
26-40	0	0.0	5	83.3	1	16.7	3	50.0	4	66.7	3	50.0	3	50.0	0	0.0
K-12 Teaching E	Experience	;														
0-5	6	23.1	16	61.5	7	26.9	10	38.5	13	50.0	6	23.1	10	38.5	2	7.7
6-10	1	4.8	19	90.5	8	38.1	12	57.1	17	81.0	10	47.6	8	38.1	2	9.5
11-15	0	0.0	11	84.6	4	30.8	3	23.1	11	84.6	7	53.8	5	38.5	1	7.7
16-40	1	8.3	10	83.3	4	33.3	8	66.7	8	66.7	5	41.7	8	66.7	0	0.0

Note. N = 73. Percentages do not add up to 100% as respondents could "mark all that apply." Interpretation of this table: Sixteen participants with 0-5 years of K-12 teaching experience (61.5%) used personal lectures to incorporate SPED topics into their music education undergraduate courses.

Participants indicated what types of field-based observations/experiences they required students to complete with students with special needs in regular music settings. An experience was defined as active participation with students while an observation was not active participation. Most interestingly, 26 participants indicated they did not require field-based observations/experiences of their students. Participants required field-based observations in a music setting (n = 15) from their music education students most frequently, followed by fieldbased experiences in music a setting (n = 14), field-based observations in a non-music setting (n = 14)= 1), and field-based experiences in a non-music setting (n = 1). When comparing title held to type of field-based observations/experiences required of undergraduate music education students to complete with students with special needs in a regular music setting, 33.3% of professors required their students to complete observations in a music setting, followed by 27.3% of instructors, 23.1% of associate professors, and 16.1% of assistant professors. The next most frequently required type of observation/experience required of students was a field-based experience (active participation) in a music setting as 25.8% of assistant professors utilized it, followed by 25.0% of professors, and 23.1% of associate professors. Perhaps most noteworthy was the number of participants who actually required field-based observations compared to how many participants did not require these of their students.

Descriptive statistics were calculated to determine whether type of observation/experience required of undergraduate music students varied by years taught at the university level. When comparing these variables, 42.9% of participants with 21-25 years of experience indicated field-based observations in a music setting. Next was 33.3% of participants with 11-15 and 26-40 years of experience, followed by 22.6% of participants with 0-5 years of experience, 20.0% of participants with 16-20 years of experience, and 14.3% of participants with

6-10 years of experience. The second most frequently required type of observation/experience was field-based experiences in a music setting as 40.0% of participants with 16-20 years of experience utilized it. Next was 33.3% of participants with 11-15 years of experience, 19.0% of participants with 6-10 years of experience, 14.3% of participants with 21-25 years of experience, and 12.9% of participants with 0-5 years of experience.

When comparing years of K-12 teaching experience to the type of observation/experience required of undergraduate music education students, 33.3% of participants with 16-40 years of experience indicated field-based observations in a music setting. Next was 30.8% of participants with 11-15 years of experience, followed by 19.0% of participants with 6-10 years of experience, and 11.5% of participants with 0-5 years of experience. The second most frequently required type of observation/experience was field-based experiences in a music setting as 23.8% of participants with 6-10 years of experience utilized it. Next was 19.2% of participants with 0-5 years of experience, 16.7% of participants with 16-40 years of experience, and 15.4% of participants with 11-15 years of experience. Again, the number of participants who did not require their students to complete any field-based observations/experiences overshadowed those participants who did require this of their students. See Table 16 for descriptive statistics showing how types of field-based observations/experiences required of music education students varied by participant's title, university teaching experience, and K-12 teaching experience.

Table 16Field-based Observations/Experiences and Teaching Experience

				Types	of Field-b	ased Obser	vations/Experi	iences				
	None	required	Field	l-based	Field	l-based	Field-based	d Experience	Field-based	d Experience	C	Other
			Observ	ations in	Observ	ations in	(Active Participation) in		(Active Par			
			Non-music Setting		Music Setting		Non-music Setting		Music Setting			
Variable	n	%	n	%	n	%	n	%	n	%	n	%
Title Held												
Professor	2	16.7	0	0.0	4	33.3	1	8.3	3	25.0	2	16.7
Associate	3	23.1	0	0.0	3	23.1	0	0.0	3	23.1	4	30.8
Professor												
Assistant	9	29.0	1	3.2	5	16.1	0	0.0	8	25.8	7	22.6
Professor												
Instructor	7	63.6	0	0.0	3	27.3	0	0.0	0	0.0	0	0.0
Lecturer	2	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Visiting	2	66.7	0	0.0	0	0.0	0	0.0	0	0.0	1	33.3
Faculty												
Teaching	1	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Assistant												
University Teac	ching Exper	rience										
0-5	12	38.7	0	0.0	7	22.6	1	3.2	4	12.9	6	19.4
6-10	10	47.6	1	4.8	3	14.3	0	0.0	4	19.0	3	14.3
11-15	0	0.0	0	0.0	1	33.3	0	0.0	1	33.3	1	33.3
16-20	1	20.0	0	0.0	1	20.0	0	0.0	2	40.0	1	20.0
21-25	2	28.6	0	0.0	3	42.9	0	0.0	1	14.3	1	14.3
26-40	1	16.7	0	0.0	2	33.3	0	0.0	0	0.0	2	33.3
K-12 Teaching	Experience											
0-5	12	46.2	0	0.0	3	11.5	0	0.0	5	19.2	5	19.2
6-10	7	33.3	1	4.8	4	19.0	0	0.0	5	23.8	4	19.0
11-15	3	23.1	0	0.0	4	30.8	0	0.0	2	15.4	4	30.8
16-40	3	25.0	0	0.0	4	33.3	1	8.3	2	16.7	1	8.3

Note. N = 73. Vertical percentages do not add up to 100%. Interpretation of this table: Twelve participants with 0-5 years of K-12 teaching experience (46.2%) did not require their students to complete field-based observations/experiences.

Research Question 2C

Does this preparation vary by institutional characteristics including: location of college/university, enrollment size of college/university, or size of music department?

I compared the same variables from RQ2B (incorporation of SPED topics and required field-based observations/experiences) to a different set of variables (institution characteristics) in order to identify possible variations among participants. When comparing these variables, 100.0% of participants from the Western NAfME region indicated using personal lectures, followed by 90.0% of Eastern participants, 81.3% of North Central participants, 80.0% of Southwestern participants, and 66.7% of Southern and Northwest participants. The next most frequently used method to incorporate SPED topics was required readings as 90.9% of Eastern participants utilized the method, 83.3% of Northwest participants, 80.0% of Southwestern participants, 68.8% of North Central participants, 66.7% of Western participants, and 50.0% of Southern participants. Furthermore, 70.0% of Southwestern participants used digital media to incorporate SPED topics, followed by 66.7% of Western participants, 63.6% of Eastern participants, 37.5% of North Central participants, 33.3% of Northwest participants, and 29.2% of Southern participants. In regards to field observations, 63.6% of Eastern participants used this method to incorporate SPED topics, followed by 60.0% of Southwestern participants, 41.7% of Southern participants, 37.5% of North Central participants, and 16.7% of Northwest and Western participants.

Descriptive statistics were calculated to determine whether incorporation of SPED topics into music education undergraduate courses varied by university undergraduate enrollment. When comparing these variables, 100.0% of participants who taught at universities with enrollments of 5,001-10,000 and 10,001-20,000 indicated using personal lectures. The fewest

participants who indicated using personal lectures to incorporate SPED topics taught at universities with enrollments of 1,001-3,000. The next most frequently used method to incorporate SPED topics was required readings as 90.9% of participants who taught at universities with enrollments between 10,001 and 20,000 utilized the method. Participants who taught at universities with enrollment between 1,001 and 3,000 used required readings the fewest. Furthermore, participants who taught at universities with enrollments between 5,001 and 10,000 used digital media more than any other group to incorporate SPED topics. Participants at universities with enrollment between 3,001 and 5,000 used digital media the least. In regards to field observations, participants at universities with enrollment of 5,001-10,000 used this method 75.0% while participants at small universities with few than 1,000 undergraduate students used this method 20.0%.

When comparing number of music education majors to method of incorporating SPED topics, 100.0% of participants who taught at universities with 30-39 undergraduate music education majors indicated using personal lectures. The next highest percentage was 81.5% of participants who taught at universities with more than 60 music education majors. Next, 85.7% of participants with 20-29 music education majors used required readings to incorporate SPED topics. Participants at universities with more than 60 music education majors used required readings 77.8%. Participants at large universities with more than 60 music education majors utilized digital media 59.3%. Finally, 51.9% of participants at large universities with more than 60 music education majors used field observations to incorporate SPED topics. See Table 17 for descriptive statistics showing how incorporation of SPED topics into music education undergraduate courses varied by participant's location, university undergraduate enrollment, or enrollment of undergraduate music education majors.

Table 17Method of SPED Topic Incorporation and University Demographics

											on Undergr					
	N	one	Per	rsonal	C	Juest	D	igital		quired	Classi	room	Fi	eld	(Other
			Leo	ctures	Le	ctures	N	1edia	Rec	idings	Demons	trations	Obser	vations		
Variable	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
NAfME Region																
Southern	5	20.8	16	66.7	5	20.8	7	29.2	12	50.0	6	25.0	10	41.7	3	12.5
Eastern	1	9.1	10	90.9	7	63.6	7	63.6	10	90.9	7	63.6	7	63.6	0	0.0
North Central	1	6.3	13	81.3	5	31.3	6	37.5	11	68.8	7	43.8	6	37.5	0	0.0
Northwest	0	0.0	4	66.7	3	50.0	2	33.3	5	83.3	2	33.3	1	16.7	0	0.0
Western	0	0.0	6	100.0	1	16.7	4	66.7	4	66.7	3	50.0	1	16.7	2	33.3
Southwestern	1	10.0	8	80.0	2	20.0	7	70.0	8	80.0	4	40.0	6	60.0	0	0.0
University Undergrade	uate En	rollment														
Fewer than 1,000	0	0.0	4	80.0	0	0.0	0	0.0	3	60.0	3	60.0	1	20.0	0	0.0
1,001 - 3,000	2	11.8	12	70.6	6	35.3	7	41.2	10	58.8	5	29.4	9	52.9	1	5.9
3,001 - 5,000	3	27.3	8	72.7	1	9.1	4	36.4	8	72.7	5	45.5	3	27.3	1	9.1
5,001 - 10,000	0	0.0	4	100.0	1	25.0	3	75.0	3	75.0	2	50.0	3	75.0	0	0.0
10,001 - 20,000	0	0.0	11	100.0	5	45.5	8	72.7	10	90.9	7	63.6	8	72.7	0	0.0
More than 20,000	3	12.0	18	72.0	10	40.0	11	44.0	16	64.0	7	28.0	7	28.0	3	12.0
Enrollment of Underg	raduate	Music E	Educatio	on Majors	S											
Fewer than 20	2	13.3	11	73.3	2	13.3	4	26.7	9	60.0	7	46.7	6	40.0	1	6.7
20 - 29	0	0.0	5	71.4	1	14.3	2	28.6	6	85.7	3	42.9	1	14.3	1	14.3
30 - 39	0	0.0	9	100.0	3	33.3	5	55.6	6	66.7	2	22.2	6	66.7	0	0.0
40 - 49	1	25.0	3	75.0	0	0.0	1	25.0	2	50.0	1	25.0	1	25.0	0	0.0
50 – 59	1	14.3	5	71.4	4	57.1	4	57.1	5	71.4	3	42.9	2	28.6	1	14.3
More than 60	3	11.1	22	81.5	12	44.4	16	59.3	21	77.8	13	48.1	14	51.9	2	7.4
Not sure	1	25.0	2	50.0	1	25.0	1	25.0	1	25.0	0	0.0	1	25.0	0	0.0

Note. N = 73. Percentages do not add up to 100% as participants could "mark all that apply." Interpretation of this table: Eleven participants who taught at universities with fewer than 20 undergraduate music education majors (73.3%) used personal lectures to incorporate SPED topics into their music education courses.

Descriptive statistics were calculated to compare NAfME region to type of field-based observations/experiences required of undergraduate music education students to complete with students with special needs in a regular music setting. Participants from the Eastern NAfME region required their students to complete observations in a music setting 36.4% followed by 25.0% of Southern participants. The next most frequent type of observation/experience required of students was a field-based experience (active participation) in a music setting as 30.0% of Southwestern participants utilized it, followed by 25.0% of North Central participants, and 16.7% of Southern participants.

The type of observation/experience required of undergraduate music students was compared to university undergraduate enrollment. When analyzing these variables, 60.0% of participants at small universities with enrollments fewer than 1,000 used field-based observations in a music setting, followed by 29.4% of participants at universities with enrollments between 1,001 and 3,000. The second most frequently required type of observation/experience was field-based experiences in a music setting as 45.5% of participants at universities with enrollment of 10,001-20,000 utilized it. Next was 23.5% of participants at universities with enrollments of 1,001-3,000.

Participants at universities with 30-39 undergraduate music education majors required their students to complete field-based observations in a music setting 55.6% of the time. Interestingly, participants (n = 9) who taught at large universities with more than 60 undergraduate music education majors required their students to complete field-based experience (active participation) in a music setting more than the rest of the participants combined. See Table 18 for descriptive statistics showing how types of field-based observations/experiences

required of music education students varied by participant's location, university undergraduate enrollment, or enrollment of undergraduate music education majors.

Table 18Field-based Observations/Experiences and University Demographics

				Types of	of Field-b	ased Observ	ations/Experie	ences				
	N	lone	Field	l-based	Field	d-based	Field-based	l Experience	Field-based	l Experience	C	Other
	required		Observ	ations in	Observ	vations in	(Active Par	ticipation) in	(Active Par			
			Non-music Setting		Music Setting		Non-music Setting		Music Setting			
Variable	n	%	n	%	n	%	n	%	n	%	n	%
NAfME Region												
Southern	9	37.5	0	0.0	6	25.0	1	4.2	4	16.7	4	16.7
Eastern	2	18.2	0	0.0	4	36.4	0	0.0	2	18.2	3	27.3
North Central	5	31.3	0	0.0	2	12.5	0	0.0	4	25.0	3	18.8
Northwest	4	66.7	0	0.0	1	16.7	0	0.0	0	0.0	1	16.7
Western	3	50.0	0	0.0	1	16.7	0	0.0	1	16.7	1	16.7
Southwestern	3	30.0	1	10.0	1	10.0	0	0.0	3	30.0	2	20.0
Undergraduate Enrollr	nent											
Less than 1,000	1	20.0	0	0.0	3	60.0	0	0.0	0	0.0	1	20.0
1,001 - 3,000	5	29.4	0	0.0	5	29.4	1	5.9	4	23.5	1	5.9
3,001 - 5,000	6	54.5	0	0.0	2	18.2	0	0.0	1	9.1	2	18.2
5,001 - 10,000	2	50.0	0	0.0	1	25.0	0	0.0	0	0.0	1	25.0
10,001 - 20,000	2	18.2	0	0.0	1	9.1	0	0.0	5	45.5	3	27.3
More than 20,000	10	40.0	1	4.0	4	16.0	0	0.0	3	12.0	6	24.0
Enrollment of Undergr	raduate	Music E	ducation N	l ajors								
Fewer than 20	6	40.0	0	0.0	3	20.0	1	6.7	1	6.7	4	26.7
20 - 29	2	28.6	0	0.0	2	28.6	0	0.0	0	0.0	2	28.6
30 - 39	3	33.3	0	0.0	5	55.6	0	0.0	1	11.1	0	0.0
40 - 49	2	50.0	0	0.0	1	25.0	0	0.0	1	25.0	0	0.0
50 - 59	3	42.9	0	0.0	2	28.6	0	0.0	1	14.3	1	14.3
More than 60	9	33.3	1	3.7	1	3.7	0	0.0	9	33.3	7	25.9
Not sure	1	25.0	0	0.0	1	25.0	0	0.0	1	25.0	0	0.0

Note. N = 73. Vertical percentages do not add up to 100%. Interpretation of this table: Twenty-five percent of participants who taught in the Southern NAfME region required their students to complete a field-based observation in a music setting.

Research Question 3

What changes, if any, are music education professors considering to improve how they prepare undergraduate music education majors to work with inclusion students with special needs?

Participants were asked how they planned to revise their curriculum to address teaching students with special needs in their courses for music education majors. Twenty-seven participants (37.0%) indicated they plan to revise their curriculum; however, 21 participants (28.8%) said they do not plan to revise their curriculum while 23 participants (31.5%) said they are unsure whether they plan to adjust curriculum. Participants who planned to revise their curriculum also included types of changes they plan to incorporate. Ten participants (13.7%) plan to adjust content in their courses/curriculum while seven participants (9.6%) look to add real-life situations or field experiences to their curriculum. Five participants (6.8%) plan to adjust their curriculum by adding more guest presentations. I also asked them to include any additional information they felt was relevant to the topic. Nine participants (12.3%) stated SPED topics were already included in their curriculum or taught by colleagues in the department. Several participants alluded to hurdles possibly hindering them from changing their curriculum. Six participants (8.2%) stated there are either department or university limitations to change regarding this topic while five participants (6.8%) stated they actually needed more training to better prepare their students. See Table 19 for descriptive statistics regarding participants' plans to revise curriculum, the types of revisions, and additional comments related to this topic.

Table 19

Curriculum Revision Plans and Additional Comments about Topic or Survey

Variable	n	%
Plans to Revise Curriculum		
Yes	27	37.0
No	21	28.8
Not sure	23	31.5
Missing	2	2.7
Types of Curriculum Revisions		
Guest presentations	5	6.8
Real-life situations/field experiences	7	9.6
Course/ curriculum revision	10	13.7
Additional Comments		
Additional Music Training Needed	5	6.8
Limitations for Change	6	8.2
Personal Experiences Drive SPED	3	4.1
Topic Incorporation		
SPED Topic Included in Current Program	9	12.3

Note. Percentages do not add up to 100% for types of curriculum revisions and additional comments as not all participants chose to answer those questions.

Summary

Participants overwhelmingly rated their own undergraduate training to work with students with special needs as less than adequate based on a five-point Likert scale. Perhaps even more surprising was 17 participants indicated they did not receive any preparation to work with students with special needs. Most participants rated their post-undergraduate SPED training as either adequate, more than adequate, or highly adequate using a five-point Likert scale. A Spearman correlation coefficient showed a moderate, positive, monotonic correlation between number of music methods courses taught by the participants and the number of courses taught by the participants addressing SPED topics. The more undergraduate music methods courses participants taught, the more likely they were to incorporate SPED topics into these courses. Participants most frequently incorporated SPED topics into their courses using these methods:

personal lectures, required readings, digital media, and field observations. Several participants (n = 8) did not incorporate any SPED topics into their undergraduate music education courses. Also, many participants (n = 26) did not require their students to complete any field-based observations/experiences. While 37% of participants indicated plans to revise curriculum to include additional topics addressing educating inclusion/students with special needs in their courses for music education majors, 60.3% indicated they either did not plan to revise curriculum or were not sure.

Chapter V

Discussion

The purpose of this study was to examine how current music teacher educators prepare future music teachers to work with students with special needs, in terms of how the music teacher educators were themselves prepared to work with this population of students and whether their own preparation affected how they incorporate SPED topics into their music courses. I sought to examine music teacher educators' perceptions regarding the type and adequacy of preservice training they received to work with students with special needs. The Qualtrics^{XM} survey included questions grouped into five categories: (a) demographic information including title held, location and size of university, years of collegiate teaching, etc.; (b) professional experience at K-12 level; (c) personal training to work with students with special needs; (d) college teaching responsibilities/course content and special education topics SPED; and (e) proposed changes for preparing preservice music teachers to work with students with special needs. I used the NAfME Research Survey Assistance program to administer the survey nationwide to 1,054 potential participants. In order to make generalizations about a population size of 1,054, the ideal sample size needs to be at least 282 with a confidence level of 95% (Qualtrics^{XM}, 2023). Participants who submitted usable data included 73 current music teacher educators from 31 of the 50 states in the United States. Therefore, results from this study are limited to the sample size and not generalized to a larger population. Differences observed in the data call attention to possible trends in this population of participants. This chapter includes discussion and interpretation of findings from the previous chapter, conclusions, implications of results, and suggestions for future research.

Differences among Demographics

Descriptive statistics (frequencies and percentages) were used to analyze all demographic variables, and there were some differences in responses based on participant demographics. Over three-fourths of participants were either full tenured professors, associate professors, or assistant professors. Interestingly, nearly one-third of participants taught in the Southern NAfME region, although this is most likely coincidental since the NAfME Research Survey Assistance program was used to administer the questionnaire. Nearly 70% of participants taught in a K-12 public school setting. Although the present study was not a replication of a prior study, there were some similarities in the questionnaire and the results of the two studies. Heller (1994) completed the first study on this topic examining music teacher educators. In her study, 77.8% of participants taught in public K-12 schools, 3.4% in private schools, 17.6% in both, and .6% had no experience. Findings from the present study included 66.9% of participants taught in public schools, 2.7% in private schools, and 17.8% in both. Most intriguing is the rise in music teacher educators with no K-12 experience (9.6%). A majority of the participants in the current study taught 10 years or less in K-12 schools (65.3%). While the teaching areas of participants' K-12 experience was spread evenly among music content areas and grade levels (elementary, middle, and high), nearly half of participants had experience in elementary general music and three-fourths taught middle school grade levels. One might surmise many of the participants in the current study are assistant professors (42.5%) with less than 10 years of experience both in K-12 schools and at the university level based on the data. Possibly another interesting trend in the data was most participants taught either at a small university (23.3% at universities with undergraduate enrollments between 1,001-3,000 and 20.5% at universities with fewer than 20 undergraduate music education majors) or much larger universities (34.2% at universities with

undergraduate enrollments greater than 20,000 and 37.0% at universities with more than 60 undergraduate music education majors).

Changes in federal laws (*EHA* in 1975 and *IDEA* in 1990 and the many revisions to *IDEA*) increased the number of students who received SPED services and the number of music teachers with SPED students mainstreamed/included in their music classes (Atterbury, 1998; Frisque et al., 1994; Gavin, 1983; Sharrock, 2007). Results from the current study compared to the Heller study (1994) support this increase in students with special needs included in music classes. In the Heller (1994) study, 62.4% of participants indicated having taught students with special needs while 28.8% said they had no experience with these students. In the present study, 87.7% of participants taught students with special needs while only 1.4% did not. This is an increase of 25% of participants with experience teaching students with special needs in less than 30 years.

Music teacher perceptions regarding mainstreaming/inclusion of students with special needs into the music classroom positively changed (Atterbury, 1986; Darrow, 1999; Gilbert & Asmus, 1981; Sideridis & Chandler, 1995; VanWeelden & Whipple, 2014a) even though music teachers reported lack of training to work with this population of students. Although teacher attitudes regarding mainstreaming/inclusion of students with special needs into music classroom positively increased concurrently with the overall increase of inclusion students into general education classrooms, music teacher attitudes declined due to their individual lack of preparation in working with this population of students (Frisque et al., 1994; Gavin, 1983; Gfeller et al., 1990; Hamblin, 2013; Sharrock, 2007; Shephard, 1993; White, 1984). The current study examines the type of undergraduate and post-undergraduate training the participants received, their perceptions regarding this training, and how they prepare future music teachers to work

with students with special needs. I now shift to the participants' training and attitudes regarding this training.

Participant Training and Preparedness

The most noteworthy trend from the participants' preparedness is lack of undergraduate and post-undergraduate training. One-fifth of participants (20.5%) did not receive any undergraduate training to work with students with special needs while 17.8% did not receive any post-undergraduate training to work with the same student population. In addition, 41.1% of participants completed an undergraduate SPED course taught by someone outside of their music department. These statistics are similar to previous findings as Heller (1994) reported 26.9% of participants did not receive any undergraduate training to work with students with special needs while 30.4% of participants completed an undergraduate SPED course taught by someone outside of the music department (Heller did not report on descriptive statistics of postundergraduate training of participants). Information presented in undergraduate SPED courses taught by someone outside of the music department often includes numerous content areas as students in these classes represent many different areas in education. The participants overwhelmingly perceived their undergraduate SPED training negatively as 74.0% rated their training less than adequate or they did not receive any formal training. Only 26.0% of participants indicated adequate or highly adequate undergraduate SPED training. The participants' perception regarding their post-undergraduate training did increase as nearly 65% rated this training as either adequate or higher. I was unable to perform a Chi-Square test to determine if a relationship existed between the undergraduate and post-undergraduate SPED training variables since the data did not meet the assumptions for the test (Fifteen cells [75.0%] have expected count less than 5. The minimum expected count is .07). A Chi-Square test would

not have been valid to perform since these variables are independent of each other. However, one might surmise participants who perceived their undergraduate SPED training adequately or greater were more likely to perceive their post-undergraduate training similarly.

Training of Preservice Music Teachers

Eight of the participants did not incorporate SPED topics into their classes nearly 60 years after the passage of *EHA*. Participants indicated using personal lectures, required readings, digital media, and field-based observations/experiences of students with special needs respectively to address SPED topics into their undergraduate courses for music education majors. Two music methods variables (number of method courses taught and number of courses participants taught including SPED topics) were isolated to determine if a relationship existed between them. I used the Shapiro-Wilk test for normality as it is best applied to smaller populations (Russell, 2018). Since data were not normally distributed, a Spearman correlation determined a moderate, positive, monotonic correlation between these variables. As participants teach more music methods courses, they are more likely to incorporate SPED topics into these courses.

Almost 40% of the participants in the present study required their students to complete field-based observations or experiences (active participation) in a regular music setting. Nearly the same amount (35.6%) of participants did not require their students to complete any field-based observations/experiences. Robinson et al. (2019) found that music teachers are more likely to include SPED topics into their music lessons when they work with exceptional learners during their preservice preparation. In another study (Conway, 2002), participants discussed the importance of meaningful fieldwork. The participants said they wanted to go back to the observations they completed in their music methods courses prior to their student teaching

experience because they did not understand where to focus. The literature speaks to the importance of field experiences/observations among preservice music teachers. Participants in the present study who did not complete field experiences/observations may be less likely to incorporate SPED topics into their curriculum once they begin teaching in K-12 schools.

Differences among Title, Teaching Experience, and Institutional Characteristics

Few differences were observed comparing how participants prepare their undergraduate students to work with students with special needs to the participants' title, university teaching experience, K-12 teaching experience, or institutional characteristics. Twenty-six participants did not require their students to complete field-based observations/experiences, and two of these participants were full tenured professors. There were very few differences among the tenure track titles as many assistant professors, associate professors, and professors incorporated all of the different types of methods (personal lectures, guest lecturers, digital media, required readings, classroom demonstrations, field-based observations/experience) into their courses. Interestingly, in regards to field-based experiences and observations, participants who taught in music departments with over 60 undergraduate music education majors either did not require them (n = 9) or required them more (n = 9) than all participants combined (see Table 18 above). Since no clear patterns emerged due to mixed results, more research is needed in this area.

Planned Revisions to Curriculum/Additional Comments

Participants discussed revisions they planned to make to their courses and included any additional comments about the topic. I recoded the open responses to categorical variables for data analysis purposes (see Appendix H for curriculum revisions and additional comments).

Although 37.0% of participants indicated they plan to change their curriculum to include additional topics addressing students with special needs in their courses for music education majors, 59.3% of participants either did not plan to revise their curriculum or they were unsure of

their intentions. Participants overwhelmingly (74%) indicated their own preservice preparation working with students with special needs was either less than adequate or nonexistent, yet, most did not plan to revise their curriculum or are unsure? Participants indicated adding guest presentations (6.8%) and real-life situations and/or field experiences (9.6%) to their curriculum. Why did only 9.6% of the participants plan to focus on revising the field-based component of curriculum, yet, 35.6% of participants did not require them of their students? These results were interesting considering the literature indicates field-based observations/experiences positively affects student attitudes regarding exceptional learners (Hourigan, 2007a; VanWeelden & Whipple, 2005; VanWeelden & Whipple, 2007).

The new categories I created after recoding the free responses for additional comments included: additional music training needed, limitations for change, and SPED topics already included in the program. If SPED topics are included in the program as indicated by 12.3% of the participants (see Table 19 above), this might help explain why some participants do not intend to revise their curriculum or are unsure. Some participants (8.2%) stated either their music department or university policy limited or restricted them from making changes to their curriculum or their course load; additionally, 6.8% of participants stated their need for further training in this area in order to better prepare their undergraduate music education students.

Several of the participants from this study answered similarly to music teacher needs expressed in past studies regarding lack of training working with students with special needs (Frisque et al., 1994; Gavin, 1983; Gfeller et al., 1990; Hamblin, 2013; Sharrock, 2007; Shephard, 1993; White, 1984).

Conclusions and Recommendations

Although more K-12 students qualify for and receive SPED services in public schools in the United States now than at any other point in time (National Center for Education Statistics, 2019), music teachers consistently indicate inadequate preservice preparation to work with students with special needs (Atterbury, 1986; Frisque et al., 1994; Gfeller et al., 1990; Gilbert & Asmus, 1981; Sharrock, 2007; Sideridis & Chandler, 1995; VanWeelden & Whipple, 2014b; White, 1981/1982). Yet, music teacher perceptions about working with this population of students (Darrow, 1999; Scott et al., 2007; VanWeelden & Whipple, 2014a) increased throughout the decades since *IDEA* became law. Research reports indicate preservice music teacher preparation programs may not adequately prepare future music educators to teach students with special needs (Colwell & Whipple, 2000; Hammel, 2001; Heller, 1994; Salvador, 2010; Shirk, 2008; VanWeelden & Whipple, 2014b). Nearly all researchers discussed in the literature review collected data from K-12 teachers. Furthermore, I located only three studies (Colwell & Thompson, 2000; Heller, 1994; Salvador, 2010) where researchers used music faculty to investigate preservice music education requirements. A study showing how current music teacher educators prepare future music teachers to work with students with special needs is necessary for the success of all students and their teachers.

If music is the universal language connecting all human beings all over the world, why do some music teachers limit who they allow to enter their classrooms? In his book, Elliot (1995) argued music should be a central and fundamental component in the education of every child. All students deserve a high quality music education. Music teachers must be willing and able to teach ALL students. Music teacher education programs are responsible for preparing every preservice music teacher to work with all students including students with special needs.

Preservice music teachers need consistent training not only to prepare them to work with students with special needs but sometimes to positively impact music teacher attitudes toward exceptional learners. Although teacher attitudes have positively changed over time, the literature also tells us music teachers feel unprepared to work with students with special needs. Most participants in this study indicated receiving no preparation or less than adequate preparation to work with students with special needs during their undergraduate training. The participants also reported increased post-undergraduate training, and their perceptions regarding this training also increased. The decision of some of the participants not to incorporate SPED topics into any of their courses, the percentage of participants who did not require field-based observations/experiences among their students considering the research explaining the benefits of these observations/experiences, and the percentage of participants who indicated they will not revise their curriculum is intriguing. However, lack of enough present studies on this topic prevent generalizations on current music teacher preparedness to work with students with special needs.

Future music educators may leave the profession entirely (Jotkoff, 2022) before beginning a graduate degree in music education. If so, then they may miss the opportunity to increase their knowledge of working with students with special needs. If high school students choose not to pursue a career in music education, and if music teachers change careers (Sutcher et al., 2023), how will K-12 principals fill music teacher vacancies? More research is needed to explore this topic to determine whether current music teacher preparation programs may need to adjust how preservice music teachers are trained to work with students with special needs.

Future Research Implications

Researchers should consider replicating this survey at a later time and recruit additional participants from different sources (College Music Society members or applied music faculty) rather than limiting prospective participants to NAfME members who selected music education as their "teaching area." Applied music faculty often teach music methods courses at their university and incorporate SPED topics into their courses for music education majors. These faculty members were not included as prospective participants if they did not select music education as the "teaching area" in their NAfME profile. Applied music faculty could provide valuable insight to this topic as participants in a replicate study.

Another study I would be interested in conducting is a longitudinal mixed methods study of an exemplar music program. Preservice music educators would be surveyed and interviewed prior to completion of their student teaching regarding the perception of their training to teach students with special needs. Then they would be surveyed and interviewed following completion of their first year of teaching. Data would be analyzed and compared to uncover changes in participant perception to work with students with special needs.

Finally, I would like to complete a case study of the same exemplar university music program. Music teacher educators and preservice music educators would be surveyed to determine how the music program prepares future music teachers to work with students with special needs. Survey results would be compared to determine differences in perceptions of the preservice music teachers and the music teacher educators. All of these studies would help address the gap in literature on this important topic.

Closing

Additional studies on this topic may help music teacher educators and university music departments examine whether they need to revise their curriculum or reform their department requirements. Curricular reform may be as simple as music teacher educators revising their courses to include more relevant and meaningful field-based observations/experiences (Conway, 2002) or cross-content collaboration between music and special education university faculty. However, it may also require more complicated changes to address department or university restrictions if new courses must be added. This will not be an easy task since many music education program requirements already exceed the maximum allotment of credits.

Music teacher educators must feel confident in their training to educate students with special needs in order to incorporate SPED topics into the music classroom. Based on the results of this study, participants perceived their own undergraduate preparation to work with students with special needs as less than adequate; however, they perceived their post-undergraduate preparation to work with the same student population more favorably. The number of participants who did not incorporate SPED topics into their courses and the percentage of participants who did not require their students to complete field-based observations/experiences is interesting. One might expect that participants would be more likely to incorporate SPED topics and require field observations/experiences of their students based on findings from previous studies and the participants' perceptions regarding their own undergraduate training. It is my hope music teacher educators and music department administrators will use these data as a springboard to examine their own curriculum/program requirements and consider whether they should address how their preservice music teachers are prepared to work with students with special needs. More research is needed in this area to uncover current university music education

program requirements so that we may determine how much progress, if any, our music teacher education programs have achieved towards preparing preservice music teachers to work with students with special needs.

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APPENDICES

APPENDIX A-1

DATA FROM 40TH ANNUAL REPORT TO CONGRESS ON THE

IMPLEMENTATION OF THE INDIVIDUALS WITH DISABILITIES EDUCATION

ACT, 2018

Exhibit 31. Percentage of students ages 6 through 21 served under IDEA, Part B, within disability category, by educational environment: Fall 2016

	Percentage o			
Disability	80% or more of the day	40% through 79% of the day	Less than 40% of the day	Other environments ^c
All disabilities	63.1	18.3	13.4	5.1
Autism	39.4	18.0	33.4	9.2
Deaf-blindness	23.0	12.2	36.7	28.0
Developmental delay ^d	64.5	18.9	15.2	1.5
Emotional disturbance	47.2	17.5	18.2	17.1
Hearing impairment	61.3	15.5	11.3	11.9
Intellectual disability	17.0	26.3	49.4	7.3
Multiple disabilities	13.7	16.8	45.5	24.0
Orthopedic impairment	52.6	15.4	23.5	8.5
Other health impairment	66.4	20.6	8.8	4.2
Specific learning disability	70.8	22.2	5.2	1.8
Speech or language impairment	87.0	5.1	4.2	3.7
Traumatic brain injury	50.8	21.6	19.8	7.8
Visual impairment	67.7	12.1	9.7	10.6

Percentage of day spent inside the regular class is defined as the number of hours the student spends each day inside the regular classroom, divided by the total number of hours in the school day (including lunch, recess, and study periods), multiplied by 100. bStudents who received special education and related services outside the regular classroom for less than 21 percent of the school day were classified in the inside the regular class 80% or more of the day category.

NOTE: Percentage was calculated by dividing the number of students ages 6 through 21 served under *IDEA*, Part B, in the disability category and the educational environment by the total number of students ages 6 through 21 served under *IDEA*, Part B, in the disability category and all educational environments for that year, then multiplying the result by 100. The sum of row percentages may not total 100 because of rounding.

SOURCE: U.S. Department of Education, EDFacts Data Warehouse (EDW), OMB #1875-0240: "IDEA Part B Child Count and Educational Environments Collection," 2016. These data are for 49 states, DC, BIE schools, PR, the four outlying areas, and the three freely associated states. Data for Wisconsin were not available. Data were accessed fall 2017. For actual IDEA data used, go to https://www2.ed.gov/programs/osepidea/618-data/state-level-data-files/index.html.

Includes data from the 50 states, the District of Columbia, the Commonwealth of Puerto Rico, and the Outlying Areas.

*Reprinted from the 40th Annual Report to Congress on the Implementation of the *Individuals* with Disabilities Education Act. 2018.

[&]quot;Other environments" consists of separate school, residential facility, homebound/hospital environment, correctional facilities, and parentally placed in private schools.

destates' use of the developmental delay category is optional for children and students ages 3 through 9 and is not applicable to students older than 9 years of age. For more information on students ages 6 through 9 reported under the category of developmental delay and states with differences in developmental delay reporting practices, see exhibits B-2 and B-3 in Appendix B.

APPENDIX A-2

DATA FROM 40TH ANNUAL REPORT TO CONGRESS ON THE

IMPLEMENTATION OF THE INDIVIDUALS WITH DISABILITIES EDUCATION

ACT, 2018

Exhibit 63. Percentage of the population ages 6 through 21 served under IDEA, Part B, by year and state: Fall 2008 and fall 2016

			Percent change
State			between 2008
	2008	2016	and 2016*
All states	8.6	9.1	5.5
Alabama	7.2	7.9	9.4
Alaska	9.6	10.3	7.2
Arizona	7.8	8.1	4.1
Arkansas	8.3	9.0	9.3
California	7.1	8.1	14.5
Colorado	6.8	7.4	8.9
Connecticut	7.9	9.3	16.9
Delaware	8.8	10.3	16.8
District of Columbia	9.3	10.0	8.2
Florida	9.5	9.1	-3.4
Georgia	7.5	8.4	12.5
Hawaii	6.6	6.4	-3.6
Idaho	6.6	7.2	9.3
Illinois	9.9	9.6	-2.6
Indiana	10.7	10.7	0.4
Iowa	9.2	8.6	-6.8
Kansas	8.7	9.4	7.9
Kentucky	9.5	9.2	-3.7
Louisiana	7.5	7.5	-1.2
Maine	11.1	12.3	11.0
Maryland	7.4	7.7	3.8
Massachusetts	11.0	11.3	2.2
Michigan	9.2	8.6	-6.2
Minnesota	9.2	10.0	9.1
Mississippi	8.1	9.0	11.7
Missouri	9.0	8.8	-2.3
Montana	7.6	7.9	4.3
Nebraska	9.8	10.2	3.9
Nevada	7.4	8.2	10.2
New Hampshire	9.6	9.8	2.4
New Jersey	11.3	12.1	6.9
New Mexico	8.6	10.6	22.4
New York	9.3	11.5	22.9
See notes at and of exhibit			

See notes at end of exhibit.

Includes data from the 50 states, the District of Columbia, the Commonwealth of Puerto Rico, and the Outlying Areas.

^{*}Reprinted from the 40th Annual Report to Congress on the Implementation of the *Individuals* with Disabilities Education Act, 2018.

APPENDIX A-2

Exhibit 63. Percentage of the population ages 6 through 21 served under IDEA, Part B, by year and state: Fall 2008 and fall 2016—Continued

			Percent change
State			between 2008
	2008	2016	and 2016*
North Carolina	8.3	8.5	2.8
North Dakota	8.1	7.8	-4.5
Ohio	9.5	9.9	4.5
Oklahoma	10.5	11.7	11.2
Oregon	8.9	9.6	6.9
Pennsylvania	9.9	11.1	12.3
Puerto Rico	10.7	15.1	41.5
Rhode Island	10.6	9.6	-9.6
South Carolina	9.2	9.3	1.5
South Dakota	8.5	9.4	10.4
Tennessee	7.9	8.6	8.8
Texas	7.1	6.7	-5.4
Utah	8.0	8.9	10.8
Vermont	_	10.1	_
Virginia	8.9	8.8	-0.9
Washington	7.9	8.6	9.2
West Virginia	11.3	11.9	5.3
Wisconsin	8.9	_	
Wyoming	9.9	9.8	-0.5

Percentage cannot be calculated because data were not available.

*Percent change was calculated for each state and "All states" by subtracting the percentage for 2008 from the percentage for 2016, dividing the difference by the percentage for 2008, and then multiplying the result by 100. Due to rounding, it may not be possible to reproduce the percent change from the values presented in the exhibit.

NOTE: Percentage for each state was calculated by dividing the number of students ages 6 through 21 served under IDEA, Part B, by the state in the year by the estimated U.S. resident population ages 6 through 21 in the state for that year, then multiplying the result by 100. Percentage for "All states" was calculated for all states with available data by dividing the number of students ages 6 through 21 served under IDEA, Part B, by all states in the year by the estimated U.S. resident population ages 6 through 21 in all states for that year, then multiplying the result by 100. Percentage for "All states" includes data for students served by BIE schools.

SOURCE: U.S. Department of Education, EDFacts Data Warehouse (EDW), OMB #1875-0240: "IDEA Part B Child Count and Educational Environments Collection," 2008 and 2016. U.S. Department of Commerce, U.S. Census Bureau. "Intercensal Estimates of the Resident Population by Single Year of Age and Sex for States and the United States: April 1, 2000 to July 1, 2016, "2008 and 2016. Students served through BIE schools are included in the population estimates of the individual states in which they reside. Data for 2008 were accessed spring 2012. Data for 2016 were accessed fall 2017. For actual IDEA data used, go to https://www2.ed.gov/brograms/osepidea/618-data/state-level-data-files/index.html.

Includes data from the 50 states, the District of Columbia, the Commonwealth of Puerto Rico, and the Outlying Areas.

*Reprinted from the 40th Annual Report to Congress on the Implementation of the *Individuals* with Disabilities Education Act, 2018.

APPENDIX B

IRB Approval Letter

A	uburn Universi	ity Human Research	Protection Progra	am
	EXEMP'	TION REVIEW AP	PLICATION	
For information Location: 115		this form, contact: THE O Phone: 334-844-59		H COMPLIANCE, Admin@auburn.edu
Submit completed app	olication and su	pporting material as o	ne attachment to IF	RBsubmit@auburn.edu.
1. PROJECT IDENTIFICA	TION	Today's	Date 9/3/2020	
a. Project Title Music Teache	r Preparation for Inclusion	on of Students with Special Need	ls: Survey of Music Teacher	Educators in the United States
b. Principal Investigator	Michael Cater		Degree(s) bachelor of music education	ition; master's of music education; specialist of music education
Rank/Title Ph.D. Candidate		Department/School	Curriculum & Teaching/Coll	ege of Education
Phone Number 770-855-1458		AU Email _	mac0120@auburn.edu	
Faculty Principal Investig	gator (required i	f Plisa student) Nancy E	Barry	
Title Professor and Coordinator of	Music Education	_Department/School_Cui	riculum & Teaching/College	of Education
Phone Number 334-844-4434		AU Email	nhb0002@auburn.edu	
Dept Head Marilyn Strutchen		Department/Schoo	Curriculum & Teaching/Col	lege of Education
Phone Number 334-844-4434		AU Email s	trutme@auburn.edu	
c. Project Personnel (oth include their role on the pranalysis, and reporting. At	oject. Role may ir	nclude design, recruitme	ent, consent process	onduct of the research and , data collection, data
Personnel Name			Degree (s)	
Rank/Title		Department/School		
Role				
AU affiliated? YES Plan for IRB approval for ne				
Personnel Name			Degree (s)	
Rank/Title		Department/School		
Role				
AU affiliated? YES Plan for IRB approval for n				
Personnel Name			Degree (s)	
Rank/Title		Department/School		
Role				
AU affiliated? YES Plan for IRB approval for n				
d. Training – Have all Key to this research) within the		oleted CITI human subje YES 🔽		g elective modules related
			Review Board h Document 09/08/2020	rersity Institutional ras approved this for use from to
AU Exemption Form Version 07.14,2020	Version Date (date	e document created): 9/3/202	0	page <u>1</u> of <u>8</u>

APPENDIX C

Information Letter for Pilot Survey

Music Teacher Preparation for Inclusion of Students with Special Needs: Survey of Music Teacher Educators in the Southeastern Region of the United States Information Letter

You are invited to participate in a pilot study to examine how higher education faculty prepare future music educators to work with students with special needs.

This study is being conducted by Michael Cater, Ed.S., a doctoral student in Music Education in the College of Education in the Curriculum & Teaching Department at Auburn University. The principal researcher will use insight gained from this pilot study to make necessary changes to the survey instrument as it will be used as part of a dissertation on the same topic.

What will be involved to participate? Your participation is voluntary. If you decide to participate, you will be asked to complete an online questionnaire that includes multiple choice questions and open-ended free answer questions. Your total time commitment will be approximately 14 minutes.

Are there any risks or discomforts? The potential risk or discomfort you may have for this pilot survey is time required to complete an anonymous questionnaire.

Are there any benefits to yourself or others? There are no benefits to you from completing this questionnaire; however, results from this study may benefit music teacher preparation as a whole.

Will there be any compensation and/or costs for this questionnaire? There is no compensation for completing this questionnaire. There are no costs for completing this questionnaire.

If you change your mind about participating, you can cancel your participation by closing your browser window at any point prior to hitting the final "Continue" button. When your answers are submitted, they are anonymous, no identifying information is collected, and it is not possible to remove them from the data group. Your decision about whether to participate or not participate will not jeopardize your future relations with Auburn University.

Your privacy will be protected. Any information obtained during the course of this study will remain anonymous.

If you have any questions about this pilot survey, contact Michael Cater (mac0120.auburn.edu) or his research advisor Dr. Nancy Barry (nhb0002@auburn.edu), Professor and Coordinator of Music Education.

HAVING READ THE INFORMATION PROVIDED, YOU MUST DECIDE IF YOU WANT TO PARTICIPATE IN THIS RESEARCH PROJECT. IF YOU DECIDE TO PARTICIPATE, THE DATA WILL SERVE AS YOUR AGREEMENT TO DO SO. KEEP THIS PAGE FOR YOUR RECORDS. ALTERNATELY, YOU CAN DOWNLOAD A PDF

OF THIS LETTER BY CLICKING THIS LINK: Survey information letter

Do you wish to participate in this pilot survey? If so, choose "yes" below. If not, you may close this browser, or choose "no" below and the questionnaire will end.

- O YES, I will participate.
- O NO, I wish to end.

APPENDIX D

Pilot Survey Instrument

Pilot Survey for Music Teacher Training Institutions

for Inclusion of Students with Special Needs

Music Teacher Preparation for Inclusion of Students with Special Needs: Survey of Music Teacher Educators in the Southeastern Region of the United States Information Letter

You are invited to participate in a pilot study to examine how higher education faculty prepare future music educators to work with students with special needs.

This study is being conducted by Michael Cater, Ed.S., a doctoral student in Music Education in the College of Education in the Curriculum & Teaching Department at Auburn University. The principal researcher will use insight gained from this pilot study to make necessary changes to the survey instrument as it will be used as part of a dissertation on the same topic.

What will be involved to participate? Your participation is voluntary. If you decide to participate, you will be asked to complete an online questionnaire that includes multiple choice questions and open-ended free answer questions. Your total time commitment will be approximately 14 minutes.

Are there any risks or discomforts? The potential risk or discomfort you may have for this pilot survey is time required to complete an anonymous questionnaire.

Are there any benefits to yourself or others? There are no benefits to you from completing this questionnaire; however, results from this study may benefit music teacher preparation as a whole.

Will there be any compensation and/or costs for this questionnaire? There is no compensation for completing this questionnaire. There are no costs for completing this questionnaire.

If you change your mind about participating, you can cancel your participation by closing your browser window at any point prior to hitting the final "Continue" button. When your answers are submitted, they are anonymous, no identifying information is collected, and it is not possible to remove them from the data group. Your decision about whether to participate or not participate will not jeopardize your future relations with Auburn University.

Your privacy will be protected. Any information obtained during the course of this study will remain anonymous.

If you have any questions about this pilot survey, contact Michael Cater (mac0120.auburn.edu) or his research advisor Dr. Nancy Barry (nhb0002@auburn.edu), Professor and Coordinator of Music Education.

HAVING READ THE INFORMATION PROVIDED, YOU MUST DECIDE IF YOU WANT TO PARTICIPATE IN THIS RESEARCH PROJECT. IF YOU DECIDE TO

PARTICIPATE, THE DATA WILL SERVE AS YOUR AGREEMENT TO DO SO. KEEP THIS PAGE FOR YOUR RECORDS. ALTERNATELY, YOU CAN DOWNLOAD A PDF OF THIS LETTER BY CLICKING THIS LINK: Survey information letter for pilot study

Do you wish to participate in this pilot survey? If so, choose "yes" below. If not, you may close this browser, or choose "no" below and the questionnaire will end.

1
○ YES, I will participate. (1)
O NO, I wish to end. (2)
Skip To: End of Survey If Music Education Teacher Preparation for Inclusion of Students with Special Needs: A Survey of Mus = NO, I wish to end.
Page Break
Most responses are multiple-choice. A few responses may require a short answer. Please select the appropriate answer(s) to the questions that you are able and willing to answer.
Page Break
Q1 Have you taught college-level music education courses within the past five years (instructor of record, co-teacher, or GTA)?
O yes (1)
O no (2)
Skip To: End of Survey If Have you taught college-level music education courses within the past five years (instructor of $r_{} = no$

Q2 What title do you hold	?		
O Professor (1)			
Associate Professo	r (2)		
Assistant Professor	(3)		
O Instructor (4)			
O Lecturer (5)			
O Visiting Faculty (6	<u>(</u>)		
Other (Please Indic	ate) (7)		
Q3 What is your gender?			
O Male (1)			
O Female (2)			
Rather not say (3)			

Q4 What state do you currently teach in?	
O Alabama (1)	
O Arkansas (2)	
O Florida (3)	
O Georgia (4)	
O Kentucky (5)	
O Louisiana (6)	
O Mississippi (7)	
O North Carolina (8)	
O South Carolina (9)	
O Tennessee (10)	
Q5 What type of college/university do you te	ach in?
O public (1)	
oprivate (2)	

Q6 How many years have you taught college/university level music education classes?	
O fewer than 2 (1)	
O 2-5 (2)	
O 6-10 (3)	
O 11-15 (4)	
O 16-20 (5)	
O over 20 (6)	
○ I do not teach music education classes (7)	
Q7 How many undergraduates are enrolled at your college/university?	
O fewer than 1,000 (1)	
1,001 to 3,000 (2)	
3,001 to 5,000 (3)	
○ 5,001 to 10,000 (4)	
10,001 to 20,000 (5)	
O more than 20,000 (6)	

Q8 How many undergraduate music education majors are enrolled at your college/university?
O fewer than 20 (1)
O 20-29 (2)
O 30-39 (3)
O 40-49 (4)
O 50-59 (5)
O more than 60 (6)
O not sure (7)
Page Break
Q9 In what type of K-12 school system were you employed prior to teaching at the college/university level?
O public (1)
O private (2)
O both (3)
O neither (4)

Q10 How many years did you teach in a K-12 school system?
O none (1)
O fewer than 2 (2)
O 2-5 (3)
O 6-10 (4)
O 11-15 (5)
O 16-20 (6)
O over 20 (7)
Q11 What grade levels did you teach? (Mark all that apply) lower elementary (1) upper elementary (2) middle or junior high school (3) high school (4)

Q12 What was your teaching area(s)? (Mark all that apply)
elementary general music (1)
elementary choral music (2)
elementary instrumental music (3)
middle/junior high general music (4)
middle/junior high choral music (5)
middle/junior high instrumental music (6)
high school general music and/or music theory and/or music technology (7)
high school choral music (8)
high school instrumental music (9)
Other (Please Indicate) (10)
Page Break —

Q13 What categories of inclusion/special needs students were present in your classes? (Mark all hat apply)
no inclusion/special needs students were present in my classes (1)
do not recall (2)
specific learning disabilities (3)
speech or language impairments (4)
intellectual disability (5)
serious emotional disturbance (6)
autism (7)
hearing impairments (8)
multiple disabilities (9)
Orthopedic impairments (10)
vision impairments (11)
developmental delay (12)
traumatic brain injury (13)
Other health impairments (Please Indicate) (14)

programs? (Mark all that apply)
received no training (1)
Course on exceptional children provided outside of music department (2)
Course on exceptional children provided by music department (3)
lecture/demonstration in a regular music education course (4)
field-based observations of special needs students in non-music classrooms (5)
field-based observations of special needs students in the regular music education settings (6)
field-based experience (active participation) with special needs students in non-music classrooms (7)
field-based experience (active participation) with special needs students in regular music education settings (8)
attendance at sessions at conferences addressing the topic of inclusion learners in music classrooms (9)
Other (Please Explain) (10)
Q15 How well did your teacher training institution prepare you to work with inclusion/special needs students?
O no preparation (1)
O less than adequate (2)
O adequate (3)
O more than adequate (4)
highly adequate (5)

Q16 Have you received any additional training in working with inclusion/special needs students since completing your undergraduate music teacher training program?
O yes (1)
O no (2)
O not sure (3)
Skip To: Q19 If Have you received any additional training in working with inclusion/special needs students since = no
Skip To: Q19 If Have you received any additional training in working with inclusion/special needs students since = not sure
Q17 Please list any additional training you have received working with inclusion/special needs students since completing your undergraduate music teacher training program in the space below.
Q18 How well did this additional training prepare you to work with inclusion/special needs students?
O no additional training received (1)
O less than adequate (2)
O adequate (3)
O more than adequate (4)
O highly adequate (5)

age Break ————————————————————————————————————	
Q19 How many music methods courses does your undergraduate music education program require?	
O 0 (1)	
O 1 (2)	
O 2 (3)	
O 3 (4)	
O 4 (5)	
O 5 (6)	
O 6 (7)	
O 7 (8)	
O 8 (9)	
O 9 (10)	
O 10 (11)	

Q2	20 How many of these undergraduate music methods courses do you teach?
	O 0 (1)
	O ₁ (2)
	O ₂ (3)
	O 3 (4)
	O 4 (5)
	O 5 (6)
	O 6 (7)
	O 7 (8)
	○ 8 (9)
	O 9 (10)
	O 10 (11)

education majors? Please mark even if you teach some of these areas combined with another course. (Mark all that apply)
none (1)
introductory music education methods (2)
general methods for all majors (3)
pre-school methods (4)
elementary general methods (5)
elementary choral methods (6)
elementary instrumental methods (7)
middle/junior high general methods (8)
middle/junior high choral methods (9)
middle/junior high instrumental methods (10)
secondary general methods (11)
secondary choral/vocal methods (17)
secondary instrumental methods (12)
music methods for special populations (13)
Conducting (14)
class instruments (15)
other (Please describe) (16)

Q21 What topics are included in the methods courses that you teach for undergraduate music

Q22 How many of the courses that you teach for undergraduate music education majors contain topics that address the education of inclusion/special needs students?
O 0 (1)
O 1 (2)
O 2 (3)
O 3 (4)
O 4 (5)
O 5 (6)
O 6 (7)
O 7 (8)
O 8 (9)
O 9 (10)
O 10 (11)
Skip To: Q24 If How many of the courses that you teach for undergraduate music education majors contain topics th = 0
Q23 In the space below, please list the names of the undergraduate courses that you teach for music education majors in which you address the education of inclusion/special needs students and include the approximate number of clock hours during the term that you devote to this topic.

inclusion/special needs students in your courses for music education majors?
O yes (1)
O no (2)
O not sure (3)
Q25 How do you incorporate the topic of educating inclusion/special needs students in your undergraduate course(s) for music education majors? (Mark all that apply)
personal lectures (1)
guest lecturers (2)
digital presentations (3)
required readings (4)
Classroom demonstration of techniques (5)
field-based observations of inclusion/special needs students in non-music classrooms (6)
field-based observations of inclusion/special needs students in the regular music education settings (7)
field-based experience (active participation) with inclusion/special needs students in non-music classrooms (8)
field-based experience (active participation) with inclusion/special needs students in the regular music education settings (9)
Other (Please explain) (10)
do not incorporate this topic in the courses I teach (11)
Page Break

Q26 Do you require students in your courses to have field-based observations/experiences with inclusion/special needs students in the regular music setting?
O yes (1)
O no (2)
Skip To: Q29 If Do you require students in your courses to have field-based observations/experiences with inclusi = no
Q27 In the space below, please indicate what types of field-based observations/experiences you require your students to have with inclusion/special needs students in the regular music setting?
Q28 How well do these field-based observations/experiences prepare your students to work with inclusion/special needs students in the regular music setting?
O less than adequate (1)
O adequate (2)
O more than adequate (3)
O highly adequate (4)

29 What categories of inclusion/special needs students have been present in the classrooms in hich your preservice students are placed? (Mark all that apply)
do not recall (1)
specific learning disabilities (2)
speech or language impairments (3)
Intellectual disability (4)
serious emotional disturbance (5)
autism (6)
hearing impairments (7)
multiple disabilities (8)
Orthopedic impairments (9)
vision impairments (10)
developmental delay (11)
traumatic brain injury (12)
other health impairments (Please Indicate) (13)
do not supervise preservice (pre-student teaching) field-based observations/experience (14)

Q30 What categories of inclusion/special needs students have been present in the classrooms in which your student teachers are placed? (Mark all that apply)
do not recall (1)
specific learning disabilities (2)
speech or language impairments (3)
intellectual disability (4)
serious emotional disturbance (5)
autism (6)
hearing impairments (7)
multiple disabilities (8)
orthopedic impairments (9)
vision impairments (10)
developmental delay (11)
traumatic brain injury (12)
other health impairments (Please Indicate) (13)
do not supervise student teachers (14)
Page Break

Q31 Who has the responsibility for teaching the course in music in special education course?	
O myself (1)	
O another music education professor (2)	
O music therapy professor (3)	
O professor who has credentials both in music education and music therapy (4)	
O graduate assistant in music education (5)	
O graduate assistant in music therapy (6)	
O other (please explain) (7)	
O this music content-specific course is not offered at my college/university (8)	
Q32 What are your department of music education requirements for preparing preservice (prestudent teaching) music teachers to work with inclusion and/or special needs students? (Mark all that apply)	
no requirements (1)	
not sure (8)	
field-based observations (2)	
field-based experiences (practicums, individual lessons, etc.) (3)	
attendance at workshops (4)	
required classes in special education outside of music department (5)	
required classes in special education within music department (6)	
Other (Please describe) (7)	

Q33 Is your music department considering changes to requirements for preparing preservice music teachers to work with inclusion/special needs students?	
O yes (1)	
O no (2)	
O not sure (3)	
Skip To: Q35 If Is your music department planning to add requirements for preparing preservice music teachers to = no	
Skip To: Q35 If Is your music department planning to add requirements for preparing preservice music teachers to = not sure	
Q34 In the space below, what changes is your music department considering for preparing preservice music teachers to work with inclusion/special needs students?	
Q35 Does your music teacher training program require students to enroll in courses provided outside of the music department that include topics which focus on inclusion/special needs students?	
O yes (1)	
O no (2)	
O not sure (3)	

Skip To: Q37 If Does your music teacher training program require students to enroll in courses provided outside o... = no

Skip To: Q37 If Does your music teacher training program require students to enroll in courses provided outside o... = not sure

Q36 In the space provided, please list the course name(s), number of credit hours, and the name of the department in which the course(s) is taught.
of the department in which the course(s) is taught.
Q37 Does your state require a special education course for teacher certification?
O yes (1)
O no (2)
O not sure (3)
Q38 If you have any additional comments about this topic or this survey, please type them in the space provided.

APPENDIX E

NAfME Research Survey Order Form

	me for Music Education
	RESEARCH ASSISTANCE ORDER FORM
ail: NAFME, Attn: Rebecca Poorba	ugh, 1806 Robert Fulton Drive, Reston, VA 20191. E-mail: rebeccap@nafme.org.
milal C	Herr Member ID
NAME / TICHACT CA	Auburn University IRB Number 20-434 EX 2000 E-MAIL mac 0120 @ auburn. edu
COMPANY / INSTITUTIOON _	Tabara day vest y into hamber 20120
PHONE	E-MAIL MACUTO & GABUTA. COG
ADDRESS	
CITY_	ST/PROV ZIP
	cations below, according to geography (ZIP, state, foreign), teaching level ducation, etc.) and/or teaching area (choral, instrumental, jazz, etc.). Cable): BY STATE BY ZIP CODE (range)
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): <u>University</u>
	Band
Interest Area:	Guitar Voice Show Choir
	☐ Jazz ☐ Special Education ☐ Teacher Education
	☐ Research ☐ Hist/Theor/Comp ☐ General Music ☐ Mariachi ☐ Technology ☐ Keyboard
Caralana Banasand (calant	all that apply, and list the number of additional on the line):
	to 5,000 members (see details on page 1): \$50.00
	/Programming Time : Included t Criteria (in excess of 2): \$10.00 x 5
✓ Basic Proofing	to an additional 5,000 members \$25.00 x
Basic Proofing Additional Lis	one): \$25.00
Basic Proofing Additional Lis Transmission Re-send (limit	
Basic Proofing Additional Lis Transmission Re-send (limit	uaranteed transmission < 5 business days): \$50.00
Basic Proofing Additional Lis Transmission Re-send (limit	
Basic Proofing Additional Lis Transmission Re-send (limit Rush Order (g SUBTOTAL: Payment Type:	uaranteed transmission < 5 business days): \$50.00 \$ 175.00
Basic Proofing Additional Lis Transmission Re-send (limit Rush Order (g SUBTOTAL: Payment Type:	uaranteed transmission < 5 business days): \$50.00 \$ 175.00
Basic Proofing Additional Lis Transmission Re-send (limit Rush Order (g SUBTOTAL: Payment Type:	uaranteed transmission < 5 business days): \$50.00 \$ 175.00
Basic Proofing Additional Lis Additional Lis Transmission Re-send (limit Rush Order (g SUBTOTAL: Payment Type: Credit Card If credit, please choose: Credit Card Number: Name (as it appears on card	Check MasterCard
Basic Proofing Additional Lis Transmission Re-send (limit Rush Order (g SUBTOTAL: Payment Type: Credit Card If credit, please choose: Credit Card Number: Name (as it appears on card Agreement: by signing the form)	Check Visa
Basic Proofing Additional Lis Transmission Re-send (limit Rush Order (g SUBTOTAL: Payment Type: Credit Card If credit, please choose: Credit Card Number: Name (as it appears on card Agreement: by signing the form)	Check Check Wisa MasterCard Amex CVV: Discover CVV: Delow, you agree that you have the full power and numberity to enter into this agreement on behalf of pany institution agrees that this transmission shall be for legitimate research purposes, and is not

APPENDIX F

Information Letter for Survey

Music Teacher Preparation for Inclusion of Students with Special Needs: Survey of Music Teacher Educators in the United States
Information Letter

You are invited to participate in a research study to examine how higher education faculty prepare future music educators to work with students with special needs.

This study is being conducted by Michael Cater, Ed.S., a doctoral student in Music Education in the College of Education in the Curriculum & Teaching Department at Auburn University. You are invited to participate because you are a NAfME member that lists teacher education and

You are invited to participate because you are a NAfME member that lists teacher education and college/university on your membership information.

What will be involved to participate? Your participation is voluntary. If you decide to participate, you will be asked to complete an online questionnaire that includes multiple choice questions and open-ended free answer questions. Your total time commitment will be approximately 12 minutes.

Are there any risks or discomforts? The potential risk or discomfort you may have for this study is completing a questionnaire regarding your knowledge of the preparation of future music teachers to work with students with special needs.

Are there any benefits to yourself or others? There are no benefits to you from completing this questionnaire; however, results from this study may benefit the music education profession as a whole.

Will there be any compensation and/or costs for this questionnaire? There is no compensation for completing this questionnaire. There are no costs for completing this questionnaire.

If you change your mind about participating, you can cancel your participation by closing your browser window at any point prior to hitting the final "Continue" button. When your answers are submitted, they are anonymous, no identifying information is collected, and it is not possible to remove them from the data group. Your decision about whether to participate or not participate will not jeopardize your future relations with Auburn University.

Your privacy will be protected. Any information obtained during the course of this study will remain anonymous. The data will be protected by the investigator. Information collected through your participation may be used in publications, research posters, presentations, and conference presentations.

If you have any questions about this study, contact Michael Cater (mac0120.auburn.edu) or his research advisor Dr. Nancy Barry (nhb0002@auburn.edu), Professor and Coordinator of Music Education.

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

HAVING READ THE INFORMATION PROVIDED, YOU MUST DECIDE IF YOU

WANT TO PARTICIPATE IN THIS RESEARCH PROJECT. IF YOU DECIDE TO PARTICIPATE, THE DATA WILL SERVE AS YOUR AGREEMENT TO DO SO. KEEP THIS PAGE FOR YOUR RECORDS. ALTERNATELY, YOU CAN DOWNLOAD A PDF OF THIS LETTER BY CLICKING THIS LINK: Survey Information Letter for Survey	
The Auburn University Institutional Review Board has approved this document for use fromto, Protocol # Study Title: Music Teacher Preparation for Inclusion of Students with Special Needs: Survey of Music Teacher Educators in the United States.	
Do you wish to participate in this study? If so, choose "yes" below. If not, you may close this browser, or choose "no" below and the questionnaire will end.	
O YES, I will participate.	
O NO, I wish to end.	

APPENDIX G

Survey Instrument

Music Teacher Preparation for Inclusion of Students with Special Needs: Survey of Music Teacher Educators in the United States
Information Letter

You are invited to participate in a research study to examine how higher education faculty prepare future music educators to work with students with special needs.

This study is being conducted by Michael Cater, Ed.S., a doctoral student in Music Education in the College of Education in the Curriculum & Teaching Department at Auburn University. You are invited to participate because you are a NAfME member that lists teacher education and college/university on your membership information.

What will be involved to participate? Your participation is voluntary. If you decide to participate, you will be asked to complete an online questionnaire that includes multiple choice questions and open-ended free answer questions. Your total time commitment will be approximately 12 minutes.

Are there any risks or discomforts? The potential risk or discomfort you may have for this study is completing a questionnaire regarding your knowledge of the preparation of future music teachers to work with students with special needs.

Are there any benefits to yourself or others? There are no benefits to you from completing this questionnaire; however, results from this study may benefit the music education profession as a whole.

Will there be any compensation and/or costs for this questionnaire? There is no compensation for completing this questionnaire. There are no costs for completing this questionnaire.

If you change your mind about participating, you can cancel your participation by closing your browser window at any point prior to hitting the final "Continue" button. When your answers are submitted, they are anonymous, no identifying information is collected, and it is not possible to remove them from the data group. Your decision about whether to participate or not participate will not jeopardize your future relations with Auburn University.

Your privacy will be protected. Any information obtained during the course of this study will remain anonymous. The data will be protected by the investigator. Information collected through your participation may be used in publications, research posters, presentations, and conference presentations.

If you have any questions about this study, contact Michael Cater (mac0120.auburn.edu) or his research advisor Dr. Nancy Barry (nhb0002@auburn.edu), Professor and Coordinator of Music Education.

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

HAVING READ THE INFORMATION PROVIDED, YOU MUST DECIDE IF YOU WANT TO PARTICIPATE IN THIS RESEARCH PROJECT. IF YOU DECIDE TO PARTICIPATE, THE DATA WILL SERVE AS YOUR AGREEMENT TO DO SO. KEEP THIS PAGE FOR YOUR RECORDS. ALTERNATELY, YOU CAN DOWNLOAD A PDF OF THIS LETTER BY CLICKING THIS LINK: Survey information letter

fromt	n University Institutional Review Board has approved this document for use to, Protocol # Study Title: Music Teacher Preparation for Students with Special Needs: Survey of Music Teacher Educators in the United
•	n to participate in this study? If so, choose "yes" below. If not, you may close r, or choose "no" below and the questionnaire will end.
O YES,	, I will participate. (1)
O NO,	I wish to end. (2)
A	l of Survey If Music Teacher Preparation for Inclusion of Students with Special ey of Music Teacher E = NO, I wish to end.
Page Break	
-	ses are multiple-choice. A few responses may require a short answer. Please select ate answer(s) to the questions that you are able and willing to answer.
Page Break	

Q1 What title do you hold?
O Professor (1)
O Associate Professor (2)
O Assistant Professor (3)
O Instructor (4)
O Lecturer (5)
O Visiting Faculty (6)
Other (Please Indicate) (7)
Q2 What state do you currently teach in?
Q3 How many years have you taught college/university level music education or methods courses?

Q4 How many undergraduates are enrolled at your college/university?	
O fewer than 1,000 (1)	
1,001 to 3,000 (2)	
3,001 to 5,000 (3)	
○ 5,001 to 10,000 (4)	
10,001 to 20,000 (5)	
O more than 20,000 (6)	
Q5 How many undergraduate music education majors are enrolled at your college/university?	
• fewer than 20 (1)	
O 20-29 (2)	
O 30-39 (3)	
O 40-49 (4)	
O 50-59 (5)	
O more than 60 (6)	
O not sure (7)	
Page Break	

Q6 In what type of K-12 school system were you employed prior to teaching at the college/university level?
O public (1)
O private (2)
O both (3)
O no K-12 experience (4)
Skip To: Q11 If In what type of K-12 school system were you employed prior to teaching at the college/university = no K-12 experience
Q7 How many years did you teach in a K-12 school system?
Q8 What grade levels did you teach? (Mark all that apply)
lower elementary (1)
Supper elementary (2)
middle or junior high school (3)
high school (4)

Q9 What was your teaching area(s)? (Mark all that apply)
Celementary general music (1)
elementary choral music (2)
elementary instrumental music (3)
middle/junior high general music (4)
middle/junior high choral music (5)
middle/junior high instrumental music (6)
high school general music and/or music theory and/or music technology (7)
high school choral music (8)
high school instrumental music (9)
Other (Please Indicate) (10)
Q10 Did you teach any students with special needs during your K-12 experience?
yes (1)
no (2)
not sure (3)
Page Break

Q11 How were you trained to work with inclusion/special needs students in your undergraduate programs? (Mark all that apply)
received no training (1)
course on exceptional children provided outside of music department (2)
course on exceptional children provided by music department (3)
lecture/demonstration in a regular music education course (4)
field-based observations of special needs students in non-music classrooms (5)
field-based observations of special needs students in the regular music education settings (6)
field-based experience (active participation) with special needs students in non-music classrooms (7)
field-based experience (active participation) with special needs students in regular music education settings (8)
attendance at sessions at conferences addressing the topic of inclusion learners in music classrooms (9)
other (Please Explain) (10)
Q12 How well did your teacher training institution prepare you to work with inclusion/special needs students?
O no preparation (1)
less than adequate (2)
O adequate (3)
O more than adequate (4)
highly adequate (5)

Q13 Have you received any additional training in working with inclusion/special needs students since completing your undergraduate music teacher training program?
O yes (1)
O no (2)
O not sure (3)
Skip To: Q16 If Have you received any additional training in working with inclusion/special needs students since = no
Skip To: Q16 If Have you received any additional training in working with inclusion/special needs students since = not sure
Q14 Please list any additional training you have received working with inclusion/special needs students since completing your undergraduate music teacher training program in the space below.
Q15 How well did this additional training prepare you to work with inclusion/special needs students?
O no additional training received (1)
O less than adequate (2)
O adequate (3)
O more than adequate (4)
highly adequate (5)

Q16 How many undergraduate music methods courses do you teach?			
	O 0 (12)		
	O ₁ (2)		
	O ₂ (3)		
	O ₃ (4)		
	O 4 (5)		
	O 5 (6)		
	O 6 (7)		
	O 7 (8)		
	○ 8 (9)		
	O 9 (10)		
	O 10 (11)		

Skip To: Q18 If How many undergraduate music methods courses do you teach? = 0

Q17 What areas are included in the methods courses that you teach for undergraduate music education majors? Please mark even if you teach some of these areas combined with another course. (Mark all that apply)
course. (Mark all that apply)
none (1)
introductory music education methods (2)
general methods for all majors (3)
pre-school methods (4)
elementary general methods (5)
elementary choral methods (6)
elementary instrumental methods (7)
middle/junior high general methods (8)
middle/junior high choral methods (9)
middle/junior high instrumental methods (10)
Secondary general methods (11)
secondary choral/vocal methods (17)
secondary instrumental methods (12)
music methods for special populations (13)
Conducting (14)
Class instruments (15)
other (Please describe) (16)

topics that address educating inclusion/special needs students?	
0 (8)	
O ₁ (2)	
O ₂ (3)	
O ₃ (4)	
O 4 (5)	
O 5 (6)	
O 6 (7)	
O 7 (9)	
O 8 (10)	
O 9 (11)	
O 10 (12)	
Skip To: Q21 If How many of the courses that you teach for undergraduate music educatio majors contain topics th = 0	n
Q19 In the space below, please list the names of the undergraduate courses that you teach f music education majors in which you address educating inclusion/special needs students are include the approximate number of clock hours during the term that you devote to this topic devote to this topic devote.	nd

Q18 How many of the courses that you teach for undergraduate music education majors contain

Q20 How do you incorporate the topic of educating inclusion/special needs students in your indergraduate course(s) for music education majors? (Mark all that apply)
personal lectures (1)
guest lecturers (2)
digital presentations (3)
required readings (4)
Classroom demonstration of techniques (5)
field-based observations of inclusion/special needs students in non-music classrooms (6)
field-based observations of inclusion/special needs students in the regular music education settings (7)
field-based experience (active participation) with inclusion/special needs students in non-music classrooms (8)
field-based experience (active participation) with inclusion/special needs students in the regular music education settings (9)
Other (Please explain) (10)
do not incorporate this topic in the courses I teach (11)
Q21 Do you require students in your courses to have field-based observations/experiences with nclusion/special needs students in the regular music setting?
O yes (1)
O no (2)
Skip To: Q23 If Do you require students in your courses to have field-based
observations/experiences with inclusi = no

Q22 In the space below, please indicate what types of field-based observations/experiences you require your students to have with inclusion/special needs students in the regular music setting?
require your students to have with inclusion/special needs students in the regular music setting:
Page Break
Q23 Do you plan to revise your curriculum to include additional topics that address educating inclusion/special needs students in your courses for music education majors?
O yes (1)
O no (2)
\bigcirc not sure (3)
Skip To: Q25 If Do you plan to revise your curriculum to include additional topics that address educating inclusi = no
Skip To: Q25 If Do you plan to revise your curriculum to include additional topics that address educating inclusi = not sure
Q24 In the space below, please indicate these revisions.
Q25 If you have any additional comments about this topic or this survey, please type them in the space provided.

APPENDIX H

Open-ended Questions and Participant Responses

Note: Items were not change to correct misspelled words.

What revisions do you plan to make to your curriculum to include additional topics that address education inclusion/special needs students in your courses for music education majors?

- Already included but always searching for more ways to incorporate re-life situations for the students to examine.
- I am always looking to improve these topics in my classes. Better readings, deeper engagement with differentiation and universal design, more opportunities to work with children in schools, etc.
- I am always updated my courses to reflect current policies and curriculum in the Pre-K-12 classroom.
- I am investigating the possibility of a study abroad program with the Special Music Center Resonarri (Finland), or Drake Music (Scotland).
- I constantly revise based on changes form personal research, themes in disability studies and special education, and policy.
- I have been very concerned with Trauma and how our future teachers are prepared to address trauma in the classroom. Besides the guest lectures, observations, etc., I would like to invite a trauma expert with experience as a music educator to work with teacher candidates post COVID-19.
- I plan on including guest presentations with class demonstrations in the future.
- I plan to add more direct experience with special needs students in a music setting as opportunities become available I also adjust my curriculum accordingly as new information, research, or techniques come out.
- I plan to incorporate additional information regarding adaptations and accommodations into my woodwind techniques course.
- I would like to devote additional time to strategies and activities in making music with special needs. I would love for students to get some field experiences with a wide variety of students, but practicum-type experiences are hard to come by at this time and in the context of our larger instructional program for undergraduate music education majors.
- I'm currently designing 371 which will be taught in the spring. 371 is entirely focused on Music and Disability. We will discuss disability theory and its applications to music education praxis and philosophy. With COVID students have only been able to watch video of me teaching in the self-contained setting from when I taught in public school. They also have been able to watch other video of SWD in the inclusive setting from my public school experiences.
- I'm hoping to create a music education specific methods course for music for exceptional children. This may be co-taught with a member of the School of Education, or may be "housed" in the School of the Arts. This has not been approved, but is something I am

- hoping to do in upcoming curriculum revisions. I feel that music for exceptional learners can be vastly different than methods and materials in the "typical" education classroom (elementary, secondary etc.,)
- Include resources on working with students with special needs in lessons, working with aides, school staff etc. Discuss ways of modifying instruments to work for various physical needs.
- Last year was my first attempt at teaching Music Education coursework to Music Education majors. I used the syllabus from previous professors and learned how to teach the class along the way. I will be teaching this same course next semester, I will be intentionally adding readings and discussions revolving around both sides of this topic: students who need additional assistance due to a learning disability and those who are due to being gifted, which is also part of "Special Education"
- More time spend on Universal Design for Learning and incorporating specific Accommodations and/or Modifications into the practice lesson plans.
- More time spent understanding adaptive classrooms and requirements, special guests who specialize in the field.
- Provide more hands-on interactive experiences with local school districts. Have preservice students interview local music teachers' experiences working with students with special needs and have local music teachers come talk with student during classtime.
- Specific readings of current research/field experiences.
- spend more time on it; invite a specialist, show some videos
- There are a few topics that are currently neglected in the music education curriculum, including this one. The curriculum is designed such that an additional course is not currently possible. So I'm planning to connect with the School of Education faculty who teach the non-music courses related to these topics in order to decide how to most strategically incorporate each throughout the courses I do teach.
- This is a current trend of education that needs to be revisited annually.
- Unsure currently due to travel challenges, but I intend to incorporate visits to classrooms that have inclusion students with seasoned teahers.

If you have any additional comments about this topic or this survey, please type them in the space provided.

- At our school, we have a specific course that covers teaching music to students with special needs (a course I don't teach). It has a robust field component where our undergraduates work directly with these students in K-12 settings.
- Hard to calculate clock hour time. We come back to this topic throughout the semester, especially as students work with students with IEP and 504 in the schools.
- I am a parent of a special needs child and this changed my whole view of this population as a teacher. I provide a unique perspective to my students. I think their perception of special populations is even more important than learning teaching techniques. Special populations widely vary in what will be the best accommodation for an individual. I try to instill a sense of compassion and the perception that all of these students are people who have difficulties expressing themselves. We need to work to help them be expressive. If a teacher is willing to be open to working with this population, then the techniques will follow. I also talk about how accommodations for special needs students are also good accommodations for ALL students.
- I appreciate the topic and the brevity of this survey. To me, I believe this study should include conversation about or at least a mention of students who are on the other end of the spectrum of special education. These students, who are often called "gifted" need additional support that we are not always taught in our undergraduate programs. Based on my years of service in public and private schools. I believe there is a sense of urgency to train teachers to be aware of how to work with students who are not learning as quickly as other students. The "gifted" students, in my opinion, seem to be left to fend for themselves because they in essence, can.
- I feel like I'm not the best responder for this, I apologize.
- I look forward to learning of your results! Good luck!
- I said I will not revise in previous question as I feel we do an adequate job of this in training in our UG curriculum...one course in the SPED dept and one course specifically focus on music settings in the School of Music. We introduce it in the introduction to Music Ed class and it is touched on across the curriculum.
- I think this is an interesting topic, and an area where we need more music specific training! Any of my work with specials needs students has just been based on my own ideas and conversations with other teachers.
- I would consider, if you ever decide to replicate this study, revising the survey in regard to field experience. There are many types of field experience, as you show in your options; however, you only allow for one selection. It would be better for this to be "mark all that apply." I hope you have reached out to Karen Salvador at Michigan State University. She did a similar survey several years ago and just replicated that study with Mara Culp in 2018. They both would be good individuals to contact. I wish you the best on finishing your dissertation and I look forward to reading your published paper!
- I would like to learn more and have an entire course on this subject
- If we had time to devote a class to this topic, I would.
- In reference to the last question we include instruction about Universal Design for Learning in almost all of our courses and we offer a specific course about music for

- special education. We are consistently looking for ways to improve our teaching and instruction to include diverse learners, but I don't know that we are specifically revising our curriculum around this topic.
- Most of my experience working with students with special needs has been "on the job" learning
- Much needed area very difficult with an already packed four years of classes. Really should be a requirement.
- MusEd majors take "exceptional learners" outside of the music department, and I have advocated for, and provided, music methods content for that course. Besides readings/discussion in my courses, I've found that's the most I can do.
- My responses may not be very helpful; I do not teach either of our music education
 methods courses, so my responses could skew your data. I know that other College of
 Education faculty and Music faculty incorporate working with special needs students in
 their courses. I encounter special needs students in my ensembles and in my conducting
 class and work with their accommodations to create the best possible outcomes for those
 students.
- My state's certification requirements (Praxis II and edTPA) dictate much of the content included in my music education courses.
- Our students take special education inclusion classes form the school of ed, but I also incorporate it in my methods classes so I can show them adaptations for music-specific situations. I incorporate a fictional child with special needs into their peer teaching so they decide upon at least one adaptation or a preventive measure (LRE) to assist that child's learning. I would prefer a class required for all Music Ed majors on the subject of music ed/SPED but this is the best we can do at this time.
- Students take a course in the School of Ed. that provides the foundational information working with children with special needs.
- Thank you very much for the opportunity to share.
- Thank you.
- The trend of capping undergraduate programs to 120 credit hours makes it very difficult for music education programs to add courses or extend field experiences. I don't see this changing in the near future, if anything it seems universities are moving to reduce the time to degree completion.
- This is a great study, something I know I was unequipped for when I left my undergrad. Thank you for doing this.
- Topic dear to my heart, and something that I am actively working to make better in my program.
- We address the inclusion of students with special needs throughout the course when we study the different topics of the curriculum.
- We are fortunate to have a course dedicated to this topic for our undergraduates. This course is for junior education majors and includes a significant (over 40 hours) of field experience in local schools. One thing I am increasingly dedicated to in this course is discussion and practice of incorporating UDL principals.
- We discuss and explore constantly how to differentiate instruction to meet student needs. The big message is always that it is the teacher's responsibility to work with the student (and student parents) and paraeducators and ed specialists to find what works. We don't always know what they can do until we try something new. But the basic approach is that

- every student gets music instruction, and we have to figure it out. So we read articles, we talk to people with learning differences, and practice strategies that commonly work.
- We don't have a music ed major at my university..however we do have required classes on arts integration and electives such as music activities. Both of those courses explicitly address students with special needs. I believe our special ed credential addresses learning with and through the arts as does our SLP major (speech, language, pathology program).
- While I hate to be a person to call into question a doctoral dissertation project (as I know it takes so long to get to this step), I do wonder why teacher perceptions of preparation to work with disabled learners (taking a specifically social model of disability frame here) is the central phenomenon here given existing (and, unfortunately, mostly unchanged) findings on this topic alongside perceptions of nondisabled learners. Perception is not always reality (see self-efficacy research) and perception studies such as this may do little to specifically address issues of inaccessibility and exclusion experienced by disabled learners. Giving voice to those students may help us develop much more intentional, and perhaps anti-ableist) practices. If you have not explored the research of Adam Patrick Bell, Jesse Rathgeber, Alex Lubet, and Joseph Abramo on issues of disability, it might be useful to help expand the prospective of this work.

Working with special needs students is included in the credential program and is embedded in discussion/lectures in the credential (post-bac) class offered in the music department.