

PREPARING UNDERGRADUATE MUSIC EDUCATION MAJORS FOR
TEACHING SPECIAL EDUCATION STUDENTS: A SURVEY OF TEACHING
INSTITUTIONS

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Preparing Undergraduate Music Education Majors For Teaching Special Education Students: A Survey of Teaching Institutions

The purpose of this study was to examine how undergraduate music education programs in the National Association for Music Education (NAfME) Southern District prepare pre-service teachers to educate special education students in the music classroom. One hundred twenty-four undergraduate music education professors responded to the electronic survey representing 85 institutions. The three most frequently cited special education curricular requirements were a special education class (67%), field observation (59%), and field experience (42%). The reported percentage of institutions requiring field observations and experiences with special education students increased from previous research (Heller, 1994). Only 10 of the institutions in the study reported offering a course specifically about teaching music to special education students. There has been a shift in the types of reported special education students present in pre-service field experience and student teaching classrooms; the percentage of field experience and student teaching classrooms with students with learning disabilities has decreased while the percentage of classrooms with autistic students present has increased. Two-thirds of respondents reported including special education topics in their music method classes, which was a slight increase from previous research (Heller, 1994).

There were statistically significant relationships between respondents' inclusion of special education topics in their music method courses and the following variables: respondents who had taught K-12 students with speech and language disabilities ($p < 0.05$), respondents who had taught K-12 students with orthopedic impairments ($p < 0.05$), respondents whose previous teaching experience included elementary general

music ($p < 0.001$) or elementary choral music ($p < 0.05$), respondents whose teaching responsibilities included an introduction to music education course ($p < 0.01$) or elementary general music methods ($p < 0.001$). In addition, there were statistically significant relationships between respondents' inclusion of special education topics in their method courses and the following types of respondents' special education training: lecture or demonstration in an undergraduate music education course ($p < 0.05$), attendance at workshops after receiving certification to teach ($p < 0.05$), use of written materials ($p < 0.001$), and no additional training after pre-service training ($p < 0.001$).

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Chapter I

Statement of the Problem

Introduction

Over the past 35 years, the number of special education students in elementary and secondary music classrooms has increased due to laws broadening the definition of what qualifies as a disability and a push to include as many special education students in the regular classroom as possible (Adamek & Darrow, 2005; Fitzgerald, 2006; Hahn, 2010; Hammel, 2004). In addition to an increasing number of special education students in the music classroom, music teachers are now responsible for students with more severe disabilities (Adamek, 2001; Adamek & Darrow, 2005; Hammel, 2004). Several studies have reported that music teachers do not feel prepared to teach students with disabilities (Atterbury, 1998; Frisque, Niebur, & Humphreys, 1994; Gfeller, Darrow, & Hedden, 1990; Gilbert & Asmus, 1981; McCord & Watts, 2010; Shelfo, 2007). Overall, music teachers have reported having received little to no training during their undergraduate coursework on teaching special education students (Atterbury, 1986; Cooper, 1999; Frisque et al., 1994; Gfeller et al., 1990; Hahn, 2010; Hoffman, 2011; Shelfo, 2007).

Background

In 1973, the Health and Rehabilitation Act (Public Law 93-112) was passed and within it, Section 504 stated that students with disabilities would have access to a free appropriate public education. Before 1973, it was common for students with disabilities to be educated separate from the main school population. The Education for All Handicapped Children Act of 1975 (PL 94-142) resulted in a major change in how

students with disabilities were served in the public school system. For the first time, schools were required to provide a free appropriate public education in the least restrictive environment possible to all students regardless of their handicap.

The law defines handicapped to include students who are mentally retarded, deaf or hard of hearing, speech-impaired, blind, emotionally disturbed, physically handicapped in some manner, have health issues, or those with specific learning disabilities (Damer, 2001). Any student with a disability is to have an Individualized Education Program (IEP). When an IEP is created, the first decision made is the most appropriate place for a student to be educated (Hammel & Hourigan, 2011b). The least restrictive environment clause has come to imply that students with disabilities should be educated as much as possible in the same educational environment as students without disabilities (Damer, 2001). This has been one of the driving forces for mainstreaming special education students in the regular classroom. As a result, music educators must be ready to teach students with disabilities regardless of the type or severity of disability.

In 1990, PL 94-124 was amended and renamed the Individuals with Disabilities Education Act (IDEA). Changes to the law included the addition of autism and traumatic brain injury as disabilities covered under the protection of IDEA. An amendment was added to IDEA in 1997 expanding the Individualized Education Program (IEP) team to include a general classroom teacher, which could be the music teacher. In addition, the act states a special education student cannot be denied educational services regardless of the student's behavior. This protects special education students from being punished for behavior that stems from their disabilities. In the context of a music classroom, special

education students cannot be denied access to a music education when their behavior is a result of their disability (Hammel & Hourigan, 2011b).

No Child Left Behind (NCLB) significantly changed how schools and students are assessed and as a result, directly impacts music educators. The requirement for schools to achieve Adequate Yearly Progress (AYP) results in some students being denied a music education because they are instead placed in remediation courses for tested areas (Hammel & Hourigan, 2011a).

Another important piece of legislation is the Americans with Disabilities Act (ADA, PL 101-336) that guaranteed nondiscrimination to people with disabilities. The language of the law does not specifically address students but ADA has been interpreted to include and protect students with disabilities. In 2008, ADA was amended as the Americans with Disabilities Act Amendments (ADAA). These amendments expanded eligibility and services for students to include the activities of reading, thinking, concentrating, sleeping, bowel functions, bladder functions, digestive functions, and eating. This expansion of disabilities means it is likely that even more students will be eligible for IEPs (Hammel & Hourigan, 2011b).

Rationale

As legislation continues to expand the definition of disabilities and there is a push to include special education students in the regular classroom, music teachers will become increasingly responsible to educate more students with disabilities (Hammel, 2004). Research suggests more often than not, that music teachers feel unprepared and lack the training to teach special education students (Atterbury, 1986; Bernstorff &

Welsbacher, 1996; Cooper, 1999; Fitzgerald, 2006; Frisque et al., 1994; Gfeller et al., 1990; Hahn, 2010; Hoffman, 2011; Shelfo, 2007; Zdzinski, 2001).

According to Gfeller et al. (1990), music teachers feel they lack the skills necessary to teach special education students, with 38% reporting never having received any training in teaching special education students and only 25% indicating that they had taken a college course about special education. The most common course cited by those who had taken a class was child psychology, which does not always focus on disabilities or how to adapt instruction for special education students (Gfeller et al., 1990). Less than 10% of the teachers in Shelfo's 2007 study reported taking more than one collegiate course on teaching special education. Even though music teachers are responsible to adapt music education goals and objectives for special education students, only 9% rated their level of knowledge to do so as competent (McCord & Watts, 2010). When asked, music teachers stated the need for more training and coursework about how to teach special education students especially in the music classroom (Cooper, 1999; Hahn, 2010; Hammel, 2001a).

Wilson and McCrary (1996) found music educators felt more capable after participating in a course designed to teach specific instructional techniques for use with special education students. After participating in field experiences with special education students, music educators felt more prepared, more capable, and more willing to teach students with disabilities (Smith & Wilson, 1999; Van Weelden & Whipple, 2007). But when asked to report how much field experience music educators had with special education students, most report only between zero to five hours (Hammel, 2001a).

Researchers have found that the curriculum offered to undergraduate music education majors greatly varies. Schmidt (1989) surveyed 180 educational institutions for pre-service teachers and found that 61% of the schools required a class including special education while 18% of the schools did not have special education included in their curriculum. Heller (1994) examined the course offerings for music education majors in special education. Forty percent had a requirement to prepare music education majors for mainstreaming while only 15% required an actual field-based observation or clinical experience with mainstreamed students. An interesting finding in Heller's results was that only 27% of the methods class professors had received training themselves in special education. Also, professors who had prior personal experience with mainstreaming were more likely to include mainstreaming topics in their method class instruction.

Colwell and Thompson (2000) gathered information about special education classes offered for undergraduate music education majors. The results showed that 74% of the schools had at least one course in special education available to music education students but 26% did not have any special education courses available. Within the universities that did have at least one special education course, only 21% had a special education class specific to the music classroom.

Problem Statement

The number of special education students in public school music classes has increased over the years due in part to IDEA and ADAA; however, music teachers consistently report a lack of knowledge and training to teach students with disabilities.

There has been little research examining the courses and training available in undergraduate music education programs. In addition, the research from the point of view of the institutions is more than 10 years old and is focused on limited geographic areas. Hoffman (2011) and Shelfo (2007) suggested the need for further research examining the availability and content of collegiate coursework on teaching special education students. Whipple and VanWeelden (2012) recommended additional investigations regarding the special education training that colleges and universities are currently offering to pre-service teachers.

Purpose

The purpose of this study is to examine how National Association of Schools of Music (NASM) accredited undergraduate music education programs in the National Association for Music Education (NAfME) southern district prepare their students to teach music to special education students. The research questions include:

1. How are undergraduate music education programs preparing future music educators to teach special education students in regards to
 - Field experiences and student teaching
 - Courses within the music education department
 - Courses within the general education department
2. What are music education professors' personal experiences in regards to
 - Teaching experience at the elementary/secondary level
 - Teaching special education students at the elementary/secondary level
 - Special education training

3. Is there a relationship between the quantity of course offerings about special education in the music classroom and
 - Undergraduate music education enrollment
 - Presence of a music therapy program
 - State teacher certification requirements
 - Respondents' teaching experience in elementary/secondary schools
 - Respondents' training in teaching special education
4. Is there a relationship between university requirements regarding learning to teach special education students and
 - Undergraduate music education enrollment
 - Presence of a music therapy program
 - State teacher certification requirements
5. Is there a relationship between including topics on teaching special education students in undergraduate music education courses and
 - Respondents' experience teaching special education students
 - Respondents' elementary/secondary teaching area
 - Respondents' training in teaching special education students
 - Respondents' number of years teaching elementary/secondary music
 - Type of undergraduate method courses respondents teach
 - Respondents' number of years teaching undergraduates
 - Presence of a music therapy program
6. Are there plans to add requirements to prepare undergraduate music education majors to teach special education students?

Delimitations

The sample will be limited to music education professors at National Association of Schools of Music (NASM) accredited institutes in the southern district of the National Association for Music Education (NAfME) that offer an undergraduate music education program.

Definitions

Inclusion – When students with disabilities participate and are educated in the general education classroom for the entire day (Hourigan, 2007).

Mainstreaming – When students with disabilities are included in the general education class for only part of the school day (Hourigan, 2007).

Special education students/Students with Disabilities/Students with Special Needs/Special Learners – Students who have a physical, emotional, or cognitive disability that requires an adaptation of teaching procedures, adapted equipment or materials, modified environment, or interventions to help students achieve a higher level of success. These terms will be used interchangeably in this paper.

Chapter II

Critical Review of Related Research Literature

Research relevant to the current study will be reviewed according to the following categories: (1) music educators' involvement in teaching special education students and the training they have received in regards to teaching special education; (2) teachers' attitudes on mainstreaming; and (3) undergraduate curriculum in the area of special education.

Music Teachers' Training and Knowledge about Special Education

Since the passage of the 1975 Education for All Handicapped Children Act (Public Law 94-142), music educators have been challenged to integrate special education students into the music classroom. Several studies have been conducted investigating the level of special education training music educators have received (Atterbury, 1986; Cooper, 1999; Frisque et al., 1994; Gfeller et al., 1990; Gilbert & Asmus, 1981; Hahn, 2010; Hoffman, 2011; Shelfo, 2007).

Shortly after the passage of Public Law 94-142, Gilbert and Asmus (1981) examined music educators' involvement with special education students, their knowledge of the legislation about special education, and the needs or issues in teaching special education. A national survey was conducted ($N = 789$), sampling music educators from all areas of the country and representing general, instrumental, and vocal music. The survey was developed from the literature on music in special education and mainstreaming, and from the professional experiences of music therapists and both music and special educators teaching special education students. The first four sections dealt

with techniques, methods, and information music educators might find useful for teaching special education students. Participants were asked to rate each item using a four-point scale (1 = *no help at all* to 4 = *extremely helpful*). The last section dealt with potential issues in the mainstreamed classroom and a six-point scale was used to determine the degree of concern (1 = *not a problem* to 6 = *a great problem*). The participants were also asked about their knowledge of PL 94-142, if they had worked with special education students, and if they had ever participated in planning an IEP.

The results showed that 63% of the music teachers surveyed taught special education students. Elementary music teachers were significantly more likely to have special education students in their classes than secondary music teachers ($p < .05$). As a group, less than a third of the secondary music teachers had participated in the IEP process but 97% of general music teachers had been involved in the IEP process. In regard to the awareness of PL 94-142, 66% of music educators were familiar with the law and out of the subgroups, general music educators (94%) were the most familiar with the law (Gilbert & Asmus, 1981).

Participants were asked to evaluate teaching techniques, methods, and information that might be helpful in teaching mainstreamed classes. Four items that were rated helpful by over 70% of the respondents were information on the implications of PL 94-142, developing IEP goals and objectives, developing music programs for special education students, and assessing students' progress. Less than 20% of the respondents reported currently using those four techniques in the classroom. This indicates that, in 1981, there was a need for information on the implications of PL 92-142 in the music classroom and a need for specific information and techniques to assist teachers in

developing music programs for special education students. Classroom operation items about which respondents expressed the greatest overall concern were adapting to individual differences and working with a large number of special education students. The results from this survey demonstrated a need for more information about teaching methods and techniques to meet the needs of special education students in the music classroom (Gilbert & Asmus, 1981).

A later study highlighted a continuing lack of assistance provided to music teachers responsible for teaching mainstreamed students (Atterbury, 1986). A questionnaire was sent to a random sample (10%) of elementary music teachers who were National Association for Music Education (formerly MENC) members in the southern division. One hundred thirty-three questionnaires were returned for a 30% response rate. The survey focused on mainstreaming in terms of administrative support, instructional adaptation, and the impact of mainstreaming on students. The survey contained 13 statements about teaching mainstreamed students and the respondents were asked to indicate how much each statement applied to their teaching situation using a 3-point scale (1 = *not at all*, 2 = *moderate*, 3 = *very much*). Almost half (46%) of the respondents stated they did not receive information about mainstreamed students in their classes. Eight-four percent indicated they had not been involved in the IEP process, which was slightly lower than the findings of Gilbert and Asmus (1981) where 97% of general music teachers were involved in developing IEPs. The data demonstrated a lack of support for mainstreaming in the elementary music classroom with 87% of the respondents reporting never having had a teacher aid for mainstreamed students, and 90% stated they were never allowed extra time to work with mainstreamed students. It is

important to note that the use of only three Likert-response choices from which to select possibly affected the potential variability of the responses, and the data may not be completely representative of the respondents' situations.

A study was conducted to examine mainstreaming practices in music education as related to preparation and instructional support provided to music educators (Gfeller et al., 1990). The research questions Gfeller et al. (1990) posed that are relevant to this literature review were: (1) Are there differences between music educators working in different specialty areas on the overall questionnaire or on the subsections? (2) What educational preparation is there for music educators in regards to mainstreaming? (3) What instructional support in regards to mainstreaming is provided for music educators? (4) Is there a correlation between the amount of instructional support and perceived success in mainstreaming? A questionnaire was mailed to music educators in Iowa and Kansas requesting information about teachers' experiences with disabled students, the amount of training in special education methods, the amount of instructional support (defined as consultation, in-service training, aides, preparation time, and teacher participation in placement decisions) provided for mainstreamed students in their music classrooms, and teachers' perceived success in mainstreaming.

Using a stratified random sample, five percent of the elementary and secondary music educators in each state were surveyed ($N = 350$). The final return rate was 76% from Iowa and 70% from Kansas with 41.5% of Iowa teachers and 58.5% of Kansas teachers reporting that they were teaching mainstreamed disabled students. The questionnaire minus the demographic information was reliable ($\alpha = .76$). There was no significant difference between the demographic information of the educators from Iowa

and Kansas, therefore the researchers combined the survey results from the two states for further analysis. The largest percentage of respondents taught multiple music specialties (general, vocal, instrumental), the largest percentage had taught grades including K-6, and almost 50% had been teaching for 10 or fewer years (Gfeller et al., 1990).

No significant differences were found between responses of music educators in different specialty areas with one exception; instrumental teachers reported significantly ($p < .01$) greater instructional support than general music or choral teachers. A chi-square analysis revealed that significantly larger proportions of handicapped instrumental students were placed according to their musical ability when compared to those placed in choral and general music classes ($p < .01$). The data showed an overall lack of training in teaching special education students with 38% of respondents having had no formal training in special education methods and only 25% of respondents having had a college course covering special education. Concerning instructional support, 65% of respondents reported that they were expected to mainstream all disabled students and 27% of respondents had assistance from instruction aides when needed. Only 13% of respondents reported being included in the students' IEP planning and 21% of respondents participated in the placement process. There was a small positive correlation between the amount of instructional support provided and perceived success in mainstreaming ($r = .40$) but statistical significance was not reported (Gfeller et al., 1990).

There was a lack of consensus about the effectiveness of mainstreaming among music educators, and the researchers speculated that this could have been caused by a lack of consensus about what successful mainstreaming is in general. The study did not address the influence of the severity of handicapped students on the perceived success of

mainstreaming. The researchers also questioned the accuracy of participants' reporting that special education students were mainstreamed in their classroom as half the participants reported special education students were not placed in their classes. It is not known whether there were no special education students at those educators' schools or if special education students were not mainstreamed in the music classrooms. The music educators might not have been aware of mainstreamed students in their classes due to their typically minimal involvement in placement decisions. The researchers suggested that stating clearer educational objectives and expectations for mainstreaming, increased instructional support especially in placement decisions, and better educational preparation for music educators would be valuable. They also suggested further research on identifying specific types of classes or in-service education that would be most effective in preparing teachers to work with special education students (Gfeller et al., 1990). The results of this study point to the need to identify the most useful and beneficial types of special education training for music educators.

Frisque et al. (1994) examined mainstreaming practices in music classes in Arizona public schools. The research questions relevant to this literature review were: (1) What was the nature and extent of mainstreaming in Arizona's music classrooms? (2) What indicators do music educators use to identify success in mainstreaming, including personal success? and (3) What variables predict success in mainstreaming?

A questionnaire was developed; one section pertaining to demographic information, a section on the objectives and characteristics of mainstreaming in music, and a section on participants' perceptions of the difficulties regarding integrating students with specific disabilities in the music classroom. One of two Likert-type response modes

were used for the non-demographic sections: a five-point scale ranged from “strongly agree” to “strongly disagree” and a four-point scale ranged from “always” to “never”. The questionnaire was pilot-tested with 16 music teachers in a single school district in Phoenix. The sample of Arizona music educators for the main study was drawn from a list provided by the Arizona Music Educators Association. Every sixth name from the list was chosen ($N = 227$). From the sample, there were 107 usable responses for a response rate of 47% (Frisque et al., 1994).

The results showed that less than 6% of respondents had never taught special education students in their music classes, but most of those respondents were instrumental music teachers and most had been teaching for fewer than five years. Forty-two percent of all respondents stated that all special learners in their school were mainstreamed into music and 84% of respondents indicated that they were responsible for teaching special learners. The most common reported disabilities mainstreamed into their classes were learning and emotional/behavioral disabilities. More than 75% reported that mainstreaming was the only option for special education students in music classes. Yet, more than 40% of the teachers reported receiving no training in special education. Only 20% of the respondents had training limited to in-services and workshops. Music educators (10%) indicated that regularly scheduled in-service training was rare while 34% had the option to request training and 44% received no special education training at all (Frisque et al., 1994).

There was a relatively low correlation ($r = .39$) between the music educators' views of their own success in mainstreaming and their perception on how special education students were effectively integrated into music classes, while 62% of music

educators responded “agree” or “strongly agree” in regards to feeling successful teaching special education students. However, only 33% of respondents agreed or strongly agreed that special learners were effectively integrated in music classes, which indicates an inconsistency between the respondents’ views on success in mainstreaming and the perception of effectiveness in integrating special learners in the music classroom. The respondents’ opinion of how effectively special learners were integrated in music classes could be influenced by their personal experience. Only eight percent reported being involved in the placement process of special learners and only three percent reported special learners were being mainstreamed on the basis of their musical achievement. (Frisque et al.,1994).

Two variables seemed to predict an individual music educator’s perceived personal success in mainstreaming. The strongest predictor variable was the respondents’ perceived ability of music educators to mainstream special education students. Respondents who selected “strongly agree” with this item were significantly more positive about their own success in mainstreaming ($p < .02$). Music educators with combined teaching assignments (general, instrumental, or vocal) felt significantly more successful than educators teaching just general music or performance-based classes ($p < .001$). The number of years of teaching experience and amount of pre-service/in-service training in special education had little to no effect on perceived success in mainstreaming. The researchers speculated that this could have been due to the lack of training provided for most music educators. Also, the study also did not define what “success in mainstreaming” means. This term could greatly differ in meaning from one music educator to another (Frisque et al., 1994).

Another study surveyed music educators in New Jersey ($N = 233$) to examine how inclusion was being implemented in music classrooms, their opinions concerning those inclusion practices, the educators' perceived successes and failures with inclusion practices, and their suggestions to improve inclusion in the music classroom (Cooper, 1999). The music educators were asked to indicate what kind of instruction they had received in teaching music to special needs students. One-third of the respondents indicated having not received any instruction or training. This percentage was similar to the data gathered from previous studies (Frisque et al., 1994; Gfeller et al., 1990). The most frequent type of special education instruction reported was workshops (73.3%), followed by undergraduate courses (21.9%) and graduate courses (17.5%). It was not noted whether the courses were solely devoted to teaching special education students or if special education was only a portion of the courses. Also, the data did not indicate whether the information in the courses was specific to the music classroom or the information was given within the context of all classrooms. The respondents were asked to rank various types of training they would find useful. The top four choices selected were reading, in-service workshops, consulting other professionals, and additional coursework.

When asked if the respondents participated in the placement decisions for special needs students, only 37 (15.9%) answered "yes". This finding is consistent with the data gathered in previous studies (Atterbury, 1986; Frisque et al., 1994; Gfeller et al., 1990; Gilbert & Asmus, 1981). To further highlight the lack of music teacher participation in placement decisions, the statement asking if the respondent was involved in IEP development had a very low mean ($M = 1.46$; $1 = \textit{almost never}$). The most frequently

reported recommendation for change in current inclusion practice was including the music teacher in IEP development meetings (17.2%) followed by improving communication and access to information (15%). Almost 10% of respondents suggested making more training available to improve inclusion in the music classroom. It is important to note that only 26.2% of the respondents were instrumental teachers while close to half (42.9%) were general music educators. The researcher suggested that the results might have been different if a greater portion of the sample had included instrumental teachers (Cooper, 1999).

Hammel (2001a) hypothesized that methods courses did not include appropriate strategies for teaching special learners. A survey was mailed to 653 elementary music teachers in Virginia; 202 were returned for a response rate of 30.9%. The participants were asked to report the special education training they had received through course work and experience in their undergraduate careers. A large majority of respondents (76%) only observed special learners for 0 to 5 hours prior to student teaching while 64% taught classes that included special learners for 0 to 5 hours during field experiences. It was interesting to note that participants with the least amount of teaching experience were more likely to have discussed teaching special learners in their undergraduate courses and observed and taught special learners in field experiences than participants with several years of teaching experience. The researcher noted that this result might indicate that undergraduate music education curricula have begun to include more discussion of and field experiences with special learners.

The participants were asked their opinion regarding additional areas of study and/or experiences concerning special learners that should be included in the

undergraduate music education programs. Several of the respondents spoke about the need to include additional coursework directed at including special learners in the music classroom. Many voiced their feelings of inadequacy about teaching special learners. One respondent stated, “I was never taught about special learners. My first year of teaching, I had a class of fifty that had every category from TMR (trainable mentally retarded) to the gifted in the same class. It was a horrible experience” (Hammel, 2001a, p. 8). Many of the participants also stressed the importance of field experiences that include special learners. It is evident that the researcher did find data to support the hypothesis that undergraduate methods classes were not adequately providing the necessary instruction and resources for music teachers to feel competent in teaching special education students.

Public school instrumental teachers ($N = 214$) from Maryland were surveyed about the status of inclusion in instrumental music programs, their attitudes towards the inclusion of students, their preparation to teach inclusion students, and the relationship between the teachers’ preparation and attitudes toward inclusion (Shelfo, 2007). It was found that 63.6% of the respondents did not participate in IEP development and 57.9% did not assist in the student placement process. Most respondents stated they were occasionally or never given additional time to plan and prepare for inclusion students (97.4%) nor were they given time to individualize instruction (85.5%). Most reported having adequate resources available for teaching inclusion students (79.9%) but the study did not define what those resources were. This data was consistent with findings from previous research (Atterbury, 1986; Gfeller et al., 1990; Gilbert & Asmus, 1981). Shelfo emphasized that the sample was not a random sample of instrumental teachers in

Maryland due to four school districts declining to participate in the study including the school district with the largest number of instrumental teachers. In addition, there were a disproportionate percentage of elementary band and orchestra teachers (47.7%).

The respondents were asked to report the types and amount of special education training they had received. The most common type of training was a college course in child psychology/development (42.1%). Over half reported having not received any specific training in teaching music to special education populations (60.7%). It is interesting to note that 76.5% of respondents who had been teaching between one to five years ($n = 52$) had field experience with special education students during their undergraduate training but a much smaller percentage (25.7%) of those with more than 25 years of teaching experience ($n = 9$) had field experience. The researcher pointed out that it was unknown whether this large discrepancy in quantity of field experiences among younger teachers is a result of planned special education field experience or just a result of an increase in the number of special education students in public schools from 30 years ago. This suggests that future research is needed to investigate whether universities are purposely planning field experience with special education populations and how these experiences influence pre-service teachers' attitudes and perceptions about inclusion and special education students (Shelfo, 2007).

One study (Hahn, 2010) examined music educators' preparation and practices for teaching students with disabilities. The participants in this study ($N = 363$) were members of the Pennsylvania Music Educators Association (PMEA) teaching music in elementary and secondary schools. The online survey of 83 questions included free-

response items, fixed-choice (*Yes, No, I am not sure*) and Likert-scale items. The length of the survey may have been a contributing factor to the low response rate (15.3%).

Most of the respondents reported teaching special education students (93.1%) with 4.1% being unsure whether or not they had special education students in their classroom (Hahn, 2010). When asked what undergraduate training concerning special education they had received, 59.2% of the respondents reported at least one undergraduate course that had some information about special education. This percentage was higher than found in previous research (Frisque et al. 1994; Gfeller et al. 1990; Hourigan, 2008) indicating that perhaps university programs are covering the topic of special education more frequently. However, 64.2% of the courses the respondents participated in provided only minimal information about specific instructional techniques. When asked if their coursework on special education included any field experience, over half (44.7%) reported that it did not. Twenty-six percent of participants cited a need for better special education training specifically for music and 17.5% reported that undergraduate music education curriculum needs to address how to teach special education students with observation and hands-on experience.

The respondents were asked to rate their level of knowledge about special education legislation on a scale from *no knowledge* to *well-developed knowledge*. Over half reported a limited knowledge of their legal responsibilities when teaching students with disabilities (54.5%) and a limited knowledge of the Individuals with Disabilities Education Act (56.2%). When asked about IEPs, 55.6% indicated only a moderate knowledge level (Hahn, 2010). These findings are similar to previous studies (Gilbert & Asmus, 1981; Hourigan, 2008) and highlights the issue that music teachers are still not

receiving the necessary knowledge to teach special education students. It also indicates that not all music educators are aware of their legal responsibilities concerning special education students.

Hoffman (2011) surveyed instrumental music teachers ($N = 166$) from Idaho, Mississippi, Nebraska, Nevada, New Mexico, and Rhode Island to investigate if the teachers felt prepared and willing to accommodate students with disabilities and what perceived challenges or issues arise from inclusion. The survey was developed by the researcher and implemented online. The final response rate was 29%.

Ninety-seven percent of the participants taught special education students in their instrumental ensembles. When asked about special education training they received, 36.7% reported an undergraduate course covering special education in all class subjects while 42.2% had not taken a course in special education. This confirmed existing research (Atterbury, 1986; Cooper, 1999; Gfeller et al., 1990, Gilbert & Asmus, 1981) that many music teachers have little to no training about teaching special education students. Future research directions included examining the availability, content, and effectiveness of collegiate coursework and the investigation of programs that include field experiences with special education students (Hoffman, 2011).

When examining the research literature, it is evident that even though it has been 35 years since P.L. 94-142 was enacted, music teachers still are lacking in knowledge and training to feel successful in teaching special education students. Music educators have been consistent over the past 35 years in stating the need for more special education training strategies specific to the music classroom (Gilbert & Asmus, 1981; Cooper, 1999; Hammel, 2001a). Further research is needed to identify the most useful and

beneficial types of special education training for music educators and to ascertain what special education training in music is being provided at universities (Gfeller et al., 1990; Gilbert & Asmus, 1981; Hahn, 2010; Hoffman, 2011).

Teachers' Attitudes Towards Teaching Students with Disabilities

Several studies have suggested that teachers' attitudes towards special education students influence their perceived value and success of mainstreaming (Scott, Jellison, Chappell, & Standridge, 2007; Smith & Wilson, 1999; VanWeelden & Whipple, 2007; Wilson & McCrary, 1996). However, it is not clear whether more special education training has a positive effect on teachers' attitude towards special education students.

One study (Wilson & McCrary, 1996) examined the effect of participation in a special education course for graduate music education students on the teachers' attitudes towards teaching special education students. The participants were graduate music education students ($N = 18$). Thirteen had no previous special education training, three had taken a workshop or college course, and two had taken more than one college course on special education. Sixteen of the 18 subjects reported having some experience with special education children. The participants were given a survey as a pretest and then the same survey again as a posttest at the end of the course. The survey instrument grouped special education students into five categories: learners with emotional impairments, multiple impairments, physical impairments, mental impairments, and no impairments. Within each category, participants selected a response using a Likert-type scale from 1 = *strongly disagree* to 5 = *strongly agree* regarding three statements: (1) I would feel comfortable interacting with this individual; (2) I would be willing to work with this individual; and (3) I would feel capable working with this individual.

The pretest composite scores indicated that participants were comfortable ($M = 3.99$) and willing to work with ($M = 4.19$) special education students, but they rated themselves as feeling less comfortable working with special education students ($M = 3.38$). The posttest composite scores indicated a decrease in the participants' comfort and willingness to work with special education students while there was an increase in their perceived capability of working with those students. A t -test was done to examine the differences between the pretest and posttest mean scores. Only one response, "I would be willing to work with this individual," had a significant difference ($t = 2.16, p < .05, df = 33$) (Wilson & McCrary, 1996).

Statements concerning students with multiple disabilities and students with emotional disabilities had the lowest overall mean scores on both the pretest and posttest in the three response categories. Using a one-way analysis of variance (ANOVA) on the pretest scores for the response to "I would feel capable working with this individual," there was a significant difference ($p < .05$) between the physical impairment ($M = 3.21, SD = .065$), multiple impairments ($M = 2.60, SD = .97$), mental impairments ($M = 3.40, SD = .91$), and emotional impairments ($M = 3.20, SD = .62$). This process was repeated for "feel comfortable working with" and "willing to work with" but there was no significant difference between the responses. All the posttest responses were also analyzed and no significant differences were found (Wilson & McCrary, 1996).

Wilson and McCrary (1996) suggested that the knowledge gained during the course might have led to a more realistic understanding of the rewards and challenges of teaching special education students. The participants also ranked students with emotional and multiple disabilities lower than students with mental or physical disabilities, which

was consistent with previous research (Gfeller et al., 1990). However, their sample size was small and the findings may reflect more of the participants' feeling about the training than about the students with disabilities. Additional research with a larger sample size and the effect of training with hands-on experience was suggested, along with research that examines the relationship between teachers' music specialization and their attitudes towards teaching special education students. Wilson and McCrary (1996) suggested that there should be additional research on evaluating the impact of direct contact with special education students during training, which their study did not have. They also suggested exploring the influence of other specific training methods or models in preparing music educators to teach special education students.

Smith and Wilson (1999) investigated the effect of combining classroom instruction with a practicum experience on music educators' attitudes toward special learners. The participants ($N = 18$) were graduate music education students; ten identified themselves as having not received any formal training in teaching students with disabilities. For those who did have previous formal training, five had taken a college course, three had participated in workshops, and one had taken several college courses. The class met four days a week for four weeks; six of those days were spent in a practicum experience at a special education facility. The participants were paired with either one or two special needs students. The ages of the students ranged from pre-primary to early adulthood with most having multiple severe disabilities, while some were students with autism. The participants were not given a specific teaching structure to follow but rather were encouraged to involve their students in a variety of music activities. The participants' attitudes towards students with disabilities were measured on

the first and last day of the course with the survey instrument used by Wilson and McCrary (1996). The survey grouped items into categories by type of special learner (learners with emotional impairments, multiple impairments, physical impairments, mental impairments, and no impairments). Within each category, the participants were asked to select a response on a 5-point Likert-scale to three statements: I would feel comfortable in interacting with this individual, I would be willing to work with this individual, and I would feel capable in working professionally with this individual. The participants also rated on 5-point Likert-scale statements about the practicum experience.

When comparing the mean scores from the pre- and posttest, the highest percentage of participants were more willing to work with the students (pre, 82.17; post, 83.50) (Smith & Wilson, 1999). The statement that had the largest increase from pre- to posttest was I would feel capable in working professionally with this individual (pre, 63.94; post, 73.60). The mean scores for each of the descriptions from the pre- and posttest were compared using a nonparametric Wilcoxon Matched-Pairs Signed-Ranks Test. There were significant increases ($p < .05$) among eight statements in the capability category and one statement in the willing category. The participants also used a 5-point Likert-scale (1 = *strongly disagree*, 5 = *strongly agree*) to rate their level of agreement with statements about the practicum. The two highest mean scores (4.88; 4.88) were with the statements, “Having class on-site contributed to my understanding of disabled students” and “I’m glad I had this experience” but these results were not significant.

The results from Smith and Wilson (1999) suggest that combining a practicum experience with traditional class teaching did improve teachers’ attitudes towards students with disabilities. This increase in the participants’ reported capability for

working with special education students builds on the findings reported by Wilson and McCrary (1996). But the finding that the participants were more comfortable and more willing to work with the students with disabilities disagreed with the finding in Wilson and McCrary (1996). The researchers suggested interpreting these findings with caution as it was a small sample size and the interaction with the students was limited in time (four sessions for 20 minutes). Smith and Wilson also noted that there was no attempt to measure whether the experience influenced the participants' attitude towards students with disabilities once they returned to their classrooms. Even so, further research is necessary to explore the use of a practicum experience with special education students.

A recent study examined music teachers' attitudes and opinions about inclusion in the music classroom (Scott et al., 2007). Music teachers were purposely selected for this study because of their experience in inclusive music classrooms. The purposive sample included 43 teachers: 16 elementary music, 15 secondary orchestra, and 12 secondary band teachers. Scott et al. (2007) interviewed respondents to discover: (1) What are the teachers' perceptions of their level of involvement in the placement process and their access to resources and support? (2) What are the teachers' perceptions of the effects of inclusion on students with disabilities, students without disabilities, on themselves both in and out of school? and (3) What do teachers consider to be important advice for others teaching in inclusive music classrooms? The participants' years of teaching experience ranged from three to 36 years (mean = 13.2 years, median = 10 years), 22 teachers were from a large school district in central Texas, and 21 teachers were from Midwest and Eastern school districts. Three secondary choral teachers were

interviewed but due to the low number of participating choral teachers, their results were not included in the study.

The interviews were semi-structured with questions based upon current research on inclusion, piloted with 10 music teachers, and then revised. The revised instrument had structured questions as well as several open-ended questions to allow teachers opportunities to speak freely. The interviews were conducted in a one-to-one setting and were audio-taped. The data analysis for this study was completed in three phases: categorical coding, emotional content identification, and identification of data relevant to the research questions. A constant comparison method was used for all phases with pairs of trained graduate students making coding decisions and then the authors sampling the results for accuracy. Trained graduate students transcribed the interview audiotapes and listened to the tapes while following along with the transcripts to verify accuracy. The ratings for emotional content (highly positive, positive, neutral, negative, highly negative, negative and positive) were done with contextual clues from the teachers' words and frequency/magnitude of positive and/or negative comments (Scott et al., 2007).

The results showed that a majority of music teachers received IEPs about students with disabilities in their classes (87% elementary music teachers, 63% orchestra teachers, 66% band teachers). Even so, only 38% of elementary music teachers participated in IEP meetings, which was much lower than orchestra (87%) and band (58%) teachers. Some of the reasons elementary music teachers stated that they did not participate in IEP meetings included not being able to make arrangements to attend the meetings, having never participated in an IEP meeting, and not knowing what would be expected of them. Out of the elementary music educators, 43% indicated having support from aides and

41% had support from music therapists. Only 60% of orchestra teachers reported receiving additional support for special education students in their classrooms, but all the band teachers indicated having additional support (Scott et al., 2007).

Over 50% of the comments made concerning placement, IEP meetings, and support were perceived as neutral. A majority of the teachers (73% elementary, 87% orchestra, 63% band) stated that inclusion was a positive experience, and many teachers focused on the special education students' achievements and how the students exceeded the teachers' expectations. As for advice the teachers had to give to those teaching in an inclusion classroom, a majority of elementary and orchestra teachers suggested keeping records of effective strategies. Some teachers also suggested seeking support from many sources (Scott et al., 2007).

The positive attitudes that the teachers portrayed in this study (Scott et al., 2007) disagreed with a previous study (Wilson & McCrary, 1996). It was suggested teachers might be able to better articulate the ideas and attitudes in an interview rather than a survey, or that this particular group of teachers was simply more positive, or perhaps teachers' attitudes towards inclusion have changed over the years. This trend towards positive attitudes could be explained by an increase in direct contact with special education students. The researchers pointed out that future research is needed to identify effective ways to customize and modify music instruction for special education students.

VanWeelden and Whipple (2007) conducted a study to examine the effect of a long-term field experience on music education students' attitudes and perceptions of special needs students in the music classroom. The research questions were: (1) Did the field experience change music education major students' attitudes about their personal

level of comfort when working with physically, mentally, and emotionally disabled students? (2) Did the field experience change the music education students' attitudes about their professional level of comfort when working with physically, mentally, and emotionally disabled students? (3) Did the field experience change the music education students' attitudes about their willingness to work with students with special needs? (4) Did the field experience change the pre-service teachers' perceptions of whether their training had prepared them to work with special needs students? (5) Did the field experience change the pre-service teachers' perceptions of the behavior and learning of students with special needs? There were also comparisons made between a group of students from a previous study who worked with one subpopulation of special needs students and a group who worked with two subpopulations in this study.

The participants ($N = 59$) were undergraduate music education majors at a large university who were enrolled in a course, Assessment and Teaching Music: Secondary. The music majors ($n = 31$) who worked with two subpopulations of special needs students had nine weeks of in-class instruction and six weeks of field-based secondary general music lab experiences in the spring and fall of 2004. The music education students ($n = 28$) who worked with one subpopulation of special needs students in the previous study had ten weeks of in-class instruction and five weeks of field-based secondary general music lab experiences in the fall of 2002 and the spring of 2003 (VanWeelden & Whipple, 2005, 2007).

During the spring and fall of 2004, the pre-service teachers worked with two different special education classes in the field experiences. The first class contained students with emotional and/or behavioral disorders (EDBD) and the second class

contained students with acute cognitive delays (ACD) such as autism, Down syndrome, mental retardation, and extensive learning disabilities. The students who participated in the field experiences in the fall 2002 and spring 2003 semesters only worked with one of these classes, either the EDBD class or the ACD class, not both (VanWeelden & Whipple, 2005, 2007).

The survey instrument included 17 questions about the pre-service teachers' attitudes and perceptions of music for secondary special needs students. The questionnaire was based upon a survey used by Kaiser and Johnson (2000). All students were given the questionnaire as a pretest and at the end of the field experience the students completed the same questionnaire. All the questions used a five-point Likert-type scale ranging from *strongly disagree* to *strongly agree* (VanWeelden & Whipple, 2005, 2007).

When analyzing the data, a one-way ANOVA revealed no significant differences between the pretest scores of the pre-service teachers who worked with one subpopulation of special needs students and the pretest scores of the pre-service teachers who worked with two subpopulations of special needs students. When comparing the posttest scores of the two groups of pre-service teachers with a one-way ANOVA, no significant differences were found. One-way ANOVAs were also conducted between the pretest and posttest scores of both groups and significant increases were found. The pre-service teachers who worked with two subpopulations had a significant increase in the personal attitude category ($p < .001$), perception of teacher preparation ($p = .03$), and professional attitudes ($p = .002$). Attitudes concerning willingness and perceptions of student behavior and learning increased, but not significantly. The pre-service teachers

who worked with one subpopulation had a significant increase in personal attitudes ($p = .016$), professional attitudes ($p = .001$), and perception of teacher preparation ($p < .001$). The attitudes concerning willingness and perceptions of student behavior and learning increased but not significantly (VanWeelden & Whipple, 2007).

The results of the study (VanWeelden & Whipple, 2007) show that a combination of teaching methods and knowledge with a direct hands-on experience with special learners may positively increase pre-service teachers' attitudes towards special education students. This finding conflicts with the results from the Wilson and McCrary's (1996) study in which teachers' attitudes towards special education students decreased after additional special education training.

Hammel and Gerrity (2012) examined the effect of instruction on music educators' perceived competence for including special needs students in the music classroom. The participants were 43 music educators; eight had been teaching for more than 16 years and 35 had been teaching for less than 16 years. The participants' teaching areas included elementary general music ($n = 22$), choir ($n = 11$), band ($n = 7$), and orchestra ($n = 3$). The participants' amount of previous special education training was not reported.

The measurement instrument was a 14-item questionnaire about the skills and knowledge needed to include special needs students in the music classroom. The items were based upon previous research (Hammel, 2001b). Each item used a four-point Likert-type scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*). The participants' perceived competence was calculated by adding the scores from each item for a total possible score of 14 to 56. The following rubric was used: > 46 (very

competent), 36-46 (competent), 25-35 (incompetent), < 25 (very incompetent). The measurement instrument was administered as a pre-test before the participants took an online graduate course about including special needs students in the music classroom. The instrument was administered again as a post-test after completion of the course (Hammel & Gerrity, 2012).

The pre-test scores indicated most participants perceived themselves as competent teachers when including special education students in the music classroom ($M = 41.6$, $SD = 4.35$). The post-test scores demonstrated that after participating in the online course, most participants perceived themselves as very competent ($M = 47.2$, $SD = 4.39$). A paired-samples t-test revealed the difference between the pre- and post-test scores was significant ($p < 0.05$). The median scores and modes increased from pre- to post-test for the following items: being aware of students' needs, aware of personal role, identifying students' difficulties, and classroom management. The mode score decreased from pre- to post-test for the item pertaining to communication. A reason for the decreased score in communication could have been that the participants were unaware they were not effectively communicating with the special education teachers at their schools. Due to the apparent effectiveness in improving the participants' perceived competence with special education students, Hammel and Gerrity (2012) suggested such a course would be a valuable addition to the curriculum in music teacher preparation programs.

When examining research literature, music teacher participation in a course addressing how to teach music to special education students seems to have a positive effect on music teachers' perceived capability to teach special education students (Hammel & Gerrity, 2012; Smith & Wilson, 1999; Van Weelden & Whipple, 2007;

Wilson & McCrary, 1996). When there is also a practicum component to a music special education course, research has found that music teachers' perceived willingness to work with special education students increases (Smith & Wilson, 1999; VanWeelden & Whipple, 2007). Even so, additional research is needed to explore the effects of a practicum experience with special education students on teachers' attitudes towards students with disabilities (Scott et al., 2007; Smith & Wilson, 1999; Wilson & McCrary, 1996). In addition, further research is needed to identify effective strategies and modifications for special education students in the music classroom (Scott et al., 2007).

Undergraduate Curriculum

Colwell and Thompson (2000) investigated what courses in special education were available to music education majors, whether the available courses were required or elective, and if the available courses were specific to the music classroom or designed for the general education classroom. The sample comprised colleges and universities that offered a music education program and were listed in the 1992 National Association of Schools of Music directory (NASM). Three institutions were selected from each of the 50 states and the District of Columbia: one Research Category 1 institution, one state-funded regional institution, and one private institution when available. Any school that offered a degree in music therapy was included. The resulting sample was 196 colleges and universities with 33 Research Category 1 schools, 51 state-funded regional schools, 43 private schools, and 69 schools listed by the American Music Therapy Association.

To find out if music education majors had required coursework pertaining to mainstreaming, Colwell and Thompson (2000) studied current microfiche and on-line

catalogues. For each institution, they gathered the following information: (1) Was there a course in special education for music education majors? (2) What department offered the course and was content music-specific? (3) Was the course required or elective? The data gathered was analyzed to see if there was a difference between (1) Research Category 1, state-funded regional, and private schools; (2) universities offering degrees in music therapy and those not; and (3) schools according to Music Educators National Conference (MENC) regions.

Out of the 196 schools identified, 171 were used for data analysis (24 Research Category 1, 49 state-funded regional, 38 private schools, and 60 schools offering music therapy degrees). Twenty-five schools were eliminated due to a lack of available data on course offerings. Of the 171 schools, 127 schools had at least one course in special education available to music education majors. Using the school classifications, 71% of Research Category 1 schools, 82% of state-funded regional schools, 76% of private schools, and 68% of music therapy schools had a special education course available.

Forty-four schools did not have a special education course either as a requirement or an elective for music education majors. According to Colwell and Thompson (2000), there was often a course in the education department available but music education majors could not fit it into their curriculum without a course overload. From the 127 schools that had a course available, 109 schools required at least one course in special education (75% of Research Category 1 schools, 85% of state-funded schools, 93% of private schools, and 85% of music therapy schools). Colwell and Thompson (2000) were unable to determine if special education topics were included in general education courses or music education courses.

When comparing whether the special education courses available were non-music-specific or music-specific, of the 17 Research Category 1 schools that offered a course, 14 offered non-music and five music-specific courses. Two Research Category 1 schools offered both types of courses. One school offered a non-music elective course and required a music-specific course while the other offered a music-specific elective and a required a non-music-specific course. Three schools only offered a music-specific course with two requiring the course and the other offering the course as an elective. For the 40 state-funded regional schools offering a course, 35 were non-music-specific and seven were music-specific. The 29 private schools differed in that they only offered non-music-specific courses. For the schools with music therapy programs, 32 schools offered non-music-specific courses and 18 schools offered music-specific courses. Nine schools offered both non-music and music-specific special education courses. When comparing the schools by MENC region, the Eastern region was almost evenly split between schools with a special education course available (47%) and schools without one (53%). In every region, the number of schools with non-music-specific courses was greater than the numbers of schools with a music-specific course and all regions had a higher percentage of non-music-specific courses being required (Colwell & Thompson, 2000).

Colwell and Thompson (2000) speculated several reasons that there were not more music-specific special education classes or more required special education courses in university curricula. State certification demands, lack of personnel to teach the course, difficulties in adding a new course to the curriculum, and constraints by NASM were identified as potential barriers. NASM requires that undergraduate music education programs contain 50% music content, 30-35% general studies, and 15-20% professional

education. Any of these constraints can limit a music education student's ability to take elective education classes.

Several questions were raised by Colwell and Thompson (2000) for future research directions. Some of those questions included: 1) Are collegiate faculty including mainstreaming topics in methods classes? 2) Are practicum experiences with special education students included in the curriculum? 3) Do music therapists play a role in music-specific special education courses or music methods classes? A potential weakness of this study was that the colleges and universities were not directly contacted in regards to their curriculum offerings. The information gathered might not have been current as the information was gathered from available microfilm and online course catalogs.

Heller (1994) conducted a study to examine how colleges and universities were preparing undergraduate music education majors to work with mainstreamed special education students. The research questions addressed in the study that are relevant to this literature review were: (1) What undergraduate curricula and programs prepare pre-service music teachers to work with mainstreamed students? (2) To what extent do the professors' prior personal experiences with mainstreamed students affect teacher preparation methods for mainstreaming in their courses? (3) How are pre-service music teachers currently being prepared to work with mainstreamed students? (4) Are pre-service music teachers involved with mainstreamed students during field-based experiences and/or student teaching? (5) Do undergraduate music education programs have internal requirements for preparing majors to work with mainstreamed students? (6) Do music education programs require students to take courses outside the music

department that focus on mainstreamed students and/or special needs students? and (7)

Are there plans for changes in the undergraduate music education program to improve the preparation of pre-service teachers to work with mainstreamed students?

The sample for this survey comprised full-time instructors of music education methods courses at NASM accredited colleges/universities in Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin (103 institutions). Three hundred thirty-three surveys were mailed to faculty members at these schools. The survey was a combination of multiple choice and short written response items. The survey was piloted with seven music education methods course teachers. The first mailing of the survey resulted in 116 (35%) responses. The second mailing produced 76 more responses for a total response rate of 58% and 179 usable surveys (Heller, 1994).

When asked about their training to work with mainstreamed students, only 46 (27%) respondents had received training during their undergraduate education. The most common types of training were workshops (41%), special education courses outside of music (30%), and lectures or demonstrations in music education courses (30%). When asked about the extent of their collegiate training in preparing them to work with mainstreamed students, 64% rated their preparation as less than adequate and 22% rated it as adequate. Forty-five percent of the participants reported having received additional special education training since their undergraduate training. Of those who reported additional training, 54% reported they had received special education training through graduate studies and 52.7% reported they had attended conferences and/or workshops on teaching special education students (Heller, 1994).

When asked if the topic of mainstreaming was addressed in the music methods courses they were teaching, 100 (63%) said it was. Of the respondents whose method courses did not include mainstreaming topics, 68% did not have any plans to include the topic in future classes. Instructors who had taught special education students in public school were significantly more likely to include mainstreaming topics in their courses ($p = .00042$). Instructors who taught in private schools and had special education students were also more likely to cover mainstreaming in their courses ($p = .0408$). Eighty-three percent of instructors who did not have prior experience with special education students did not include mainstreaming topics. Instructors who had received additional training were significantly more likely to include mainstreaming ($p = .00003$) (Heller, 1994).

The courses in which mainstreaming topics were being covered were general music methods classes (66%) and introductory courses in music education (23%). Only 23 instructors required their students to have field-based experiences with mainstreamed students. According to the respondents, 82 out of 165 had students placed in field-based experiences with mainstreamed students. For student teaching experiences, this number rose to 123 out of 175 (70%). Only 41% of the music departments surveyed had internal requirements for preparing pre-service teachers to work with mainstreamed students. Seventy percent required students to enroll in courses outside the music education department that included topics on mainstreaming but 16 (21%) schools did not have this requirement. When asked to report how many required courses include special education topics, 59% reported one course, 30% reported two courses, and 11% reported 3 or more courses.

There were some differences in mainstreaming requirements between the schools in different states. Illinois had the largest percentage (71%) of departmental mainstreaming requirements while Ohio had the smallest percentage. When asked if the respondents' institution had any plans to implement additional requirements for preparing pre-service music teachers to work with mainstreamed students, 59% of the institutions that currently did not have any requirements had no plans to add any. Heller (1994) recommended replicating the study in other areas of the United States and sending a survey to graduates in music education to determine how they rate their undergraduate preparation for teaching mainstreamed students.

From the literature reviewed, it is evident that there has been a lack of available special education training for future teachers in the areas of coursework and field experience (Cooper, 1999; Frisque et al., 1994; Gfeller et al., 1990; Gilbert & Asmus, 1981; Hahn, 2010; Hammel, 2001a; Hoffman, 2011; Shelfo, 2007). There has been little research examining how universities and colleges are preparing pre-service music educators to teach special education students (Colwell & Thompson, 2000; Heller, 1994). Therefore, more research is needed to investigate the availability of courses and field experiences aimed to prepare future music educators to include special education students in their music classrooms (Cooper, 1999; Hahn, 2010; Hammel & Gerrity, 2012; Hoffman, 2011; Shelfo, 2007; Whipple & VanWeelden, 2012).

Summary

This literature review has examined the effectiveness of mainstreaming and the impact of teacher preparation in the music classroom (Frisque et al., 1994; Gfeller et al.,

1990; Gilbert & Asmus, 1981), the effect of teachers' attitudes on mainstreaming (Scott et al., 2007; Wilson & McCrary, 1996; VanWeelden & Whipple, 2007), and the status of undergraduate curricula on preparing pre-service teachers to teach mainstreamed students (Colwell & Thompson, 2000; Heller, 1994).

Examination of the existing research suggests a need for further, more current research on curricular requirements for pre-service music teachers. Even though it has been over thirty-five years since PL 94-142 was enacted, music teachers may still appear to lack the knowledge and training needed to teach special education students in the music classroom (Atterbury, 1986; Cooper, 1999; Frisque et al., 1994; Gfeller et al., 1990; Hahn, 2010; Hammel, 2001a; Hoffman, 2011; McCord & Watts, 2010; Shelfo, 2007).

Since legislation has continued to expand the definition of disabilities, more students are being formally identified as having disabilities (Damer, 2001). As a result, music educators have a growing responsibility to teach students with disabilities in their classroom (Hahn, 2010; Hoffman, 2011; Zdzinski, 2001). Due to a lack of up to date research and the geographic limitations of existing research, there is a need for further, current research on the curricular offerings for pre-service music teachers (Colwell & Thompson, 2000; Heller, 1994).

Chapter III

Methodology

Participants

The target population for the curriculum survey was music education professors at National Association of Schools of Music (NASM) accredited collegiate institutions in the southern district of NAFME which included Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, and West Virginia.

Measurement Instrument

The questionnaire (Appendix A) used was an electronic adaption of Heller's (1994) survey for music education teacher training institutions. The survey instrument contained 30 items requesting demographic information about the university, information about the participant's professional experience teaching special education students at the elementary/secondary level, special education requirements for undergraduate music education majors, and courses available to undergraduate music education majors at the institution. In order to increase the validity of the survey, it was examined by music education graduate students and college professors and revised according to suggestions and comments prior to administration. The survey was administered online using [surveymonkey.com](https://www.surveymonkey.com).

Items 1-5 examined the institutions' demographic information. The items that determined the type of institution (item 1), the institution's location (item 2), state teacher licensure requirements (item 4), and the enrollment number of undergraduate music

education majors used a multiple-choice format. The presence of a music therapy program was determined with a dichotomous format (item 3). Items 6-13 determined the institution's special education requirements. Items 7, 9, and 12 used a multiple choice format, items 6 and 13 used a checklist format while items 8 and 10 used a free response format and item 11 used a dichotomous format.

Items 14-16 determined the respondent's training in teaching special education students. Item 14 used a Likert-scale format to determine respondents' opinions about how well their pre-service institution prepared them to teach special education students. A checklist format was used to determine what special education training the respondents received during and after their pre-service training (item 15 and 16). The items that determined the number of years the respondent taught K-12 music (item 17) and the number of years the respondent taught at the collegiate level (item 21) used a multiple-choice format. A checklist format was used to determine the respondent's K-12 teaching areas (item 18), collegiate courses the respondent taught (item 22), and what special education students the respondent had in the K-12 classroom (item 19). Item 20 used a free response format to determine when the respondent left K-12 teaching.

Item 23 used a dichotomous format to determine if respondents covered special education topics in their music method courses while item 24 used a checklist format to determine how respondents included special education topics in their courses. A dichotomous format (items 25 and 27) and a checklist format (items 26 and 28) was used to determine what types of special education students the pre-service teachers at the respondent's institution interact with during field experiences and student teaching experiences. A multiple choice format (item 29) and free response format (item 30) was

used to determine what future plans the respondent's institution had for adding additional special education requirements to help prepare pre-service teachers.

Procedure

The Institutional Review Board of Indiana University in Bloomington approved this study before any data collection occurred (Appendix B). The online questionnaire was sent to 367 collegiate professors who were believed to teach undergraduate music methods courses at NASM accredited institutes in the southern district of NAfME on May 24, 2012, along with an email (Appendix C) explaining the purpose of the study and a request for participation. A follow-up email (Appendix D) was sent on June 1, 2012, to the recipients who had not yet responded. A final reminder email (Appendix E) was sent on June 8, 2012.

Five emails were returned as undeliverable. In addition, five recipients responded that they were not music education professors and one recipient indicated she was no longer teaching undergraduate music education students. One hundred-forty electronic surveys were returned; 11 of those were incomplete and five surveys were removed because the respondent did not teach any undergraduate method classes. This resulted in 124 complete surveys for a response rate of 35.3% out of 351 valid participants. A total of 85 institutions were represented out of 151 institutions surveyed for an institutional response rate of 56.3%.

Data Analysis

The data was analyzed using descriptive and inferential statistics. Frequencies were determined for all nominal level items. Chi-square tests were used as the inferential

statistic due to the outcomes and predictors being at the nominal level. In some cases, categories were collapsed in order to have cells of nearly equal size. All free response data was analyzed with emergent category coding schemes and then frequencies were calculated. Research questions one and five had a potential $N = 85$ and research questions two, three, and four had a potential $N = 124$.

Chapter IV

Results

Response Rate

One hundred-forty electronic surveys were returned; 11 surveys were incomplete and five surveys were removed because the respondent did not teach any undergraduate method classes. This resulted in 124 complete surveys from the 351 valid participants for a response rate of 35.3%. A total of 85 institutions were represented of the 151 institutions surveyed for a response rate of 56.3%. Of the 85 institutions represented, 29 (34%) had multiple professors complete the survey.

When examining institutions with multiple respondents, disagreements occurred among respondents at 29 of the institutions. The most common disagreement regarded the number of music education courses at the institution that included topics about special education ($n = 27$). When asked about institutional requirements for teaching special education topics, disagreement as to what those requirements were occurred at 89.7% of institutions ($n = 26$) with multiple responders. Respondents at 12 institutions disagreed about the undergraduate music education enrollment numbers. For nearly 75% of institutions with multiple responses ($n = 21$) there was disagreement about why a music course about teaching special education students was not offered. There was even disagreement at six institutions as to whether such a course was available. Survey respondents from the same institution also disagreed about whether their state had a special education requirement for teacher certification ($n = 12$), the number of courses outside of music that contained special education topics ($n = 13$), and whether their school offered a music therapy program ($n = 1$).

Institution Demographics

Since there were multiple individual responses from 29 of the institutions and many of those responses were conflicting, it was necessary to make a decision about what data to include in the analysis. It was determined that faculty members who supervised both pre-service field experiences and student teaching would best represent the institution. The distribution of institutions by location is presented in Table 1. Nearly half (48.2%) of the institutions reported having more than 60 undergraduate music education majors while all other respondents except for two reported having a fewer number of undergraduate music education majors. The distribution of the number of undergraduate music education majors follows in Table 2.

Table 1

Institutions by Location (N = 85)

State	Number of Schools	Percentage
Alabama	6	7.1
Florida	10	11.8
Georgia	13	15.3
Kentucky	8	9.4
Louisiana	6	7.1
Mississippi	7	8.2
North Carolina	7	8.2
South Carolina	7	8.2
Tennessee	11	12.9
Virginia	6	7.1
West Virginia	4	4.7
Total	85	100.0

Table 2

Undergraduate Music Education Major Enrollment (N = 85)

Number of Majors	Frequency	Percentage
Fewer than 20	10	11.8
20-29	7	8.2
30-39	11	12.9
40-49	6	7.1
50-60	8	9.4
More than 60	41	48.2
Do not know	2	2.4
Total	85	100.0

Respondent Demographics

Forty (32.3%) of the individual respondents ($N = 124$) reported having taught university level music education classes for more than 20 years. Thirteen (10.5%) respondents reported having taught at the university level for 16 to 20 years. Twenty-two (17.7%) reported 11 to 15 years of university teaching experience, 24 (19.4%) reported six to 10 years of university teaching experience, and 22 (17.7%) respondents had taught at the university level for two to five years. Only three (2.4%) had been teaching university classes for less than two years.

The respondents were asked to report which undergraduate music method courses they taught. The most frequently reported courses were elementary general music methods ($n = 57$), secondary instrumental methods ($n = 57$), and introduction to music

education ($n = 47$). Many respondents mentioned teaching other types of courses such as technique and research classes as well as courses in conducting, assessment, classroom management, orchestration and arranging, psychology of music, and music technology. The full list of courses taught by respondents is displayed in Table 3.

Table 3

University Music Courses Taught by Respondents ($N = 124$)

Course	Frequency	Percentage
Secondary Instrument Methods	57	46.0
Elementary General Music	57	46.0
Introduction to Music Education	47	37.9
Secondary Choral Methods	37	29.8
Secondary General Methods	32	25.8
General Music Methods for all majors	22	17.7
Elementary Choral Methods	14	11.3
Other	11	8.9
Technique (woodwind, brass, etc.)	9	7.3
Preschool Music Methods	7	5.6
Music and Special Needs	4	3.2

Note. Respondents were allowed to select multiple responses for this question therefore the number of responses is greater than N and the percentage is higher than 100%.

Eighty-three respondents (66.9%) indicated that they include special education topics in the courses they teach while 41 indicated that they do not. When asked specifically how they teach special education topics, the respondents most frequently cited lectures ($n = 64$) followed by the use of required readings ($n = 59$), and field observations in music classrooms with special education students ($n = 41$). One respondent described how groups are utilized to discuss inclusion strategies. Another explained that students have a field observation/experience with a music therapist, and one respondent indicated pairing university students with special needs students in weekly sessions. Two respondents reported requiring students to write an accommodations section for special education students in lesson plan assignments. Table 4 has the full display of results.

Table 4

*Respondents' Incorporation of Special Education Topics in Music Method Courses**(N = 83)*

Method	Frequency	Percentage
Lectures	64	77.1
Required Readings	59	71.1
Field observations in music classroom	41	49.4
Demonstration of techniques	37	44.6
Field experience in music classroom	36	43.4
Guest Lectures	30	36.1
Field observation in special education classroom	15	18.1
Recorded Presentations	8	9.6
Other	8	9.6
Field experience in special education classroom	6	7.2

Note. Respondents were allowed to select multiple responses for this question therefore the number of responses and percentages are greater than *N*.

Research Question 1

For the data pertinent to research question one, there was a potential $N = 85$. The respondents were asked to indicate the various ways their institution ($N = 85$) prepares undergraduate music education majors to teach special education students. The top three special education requirements reported were classes in special education offered outside the music department ($n = 57$), field-based observation ($n = 50$), and field-based experience ($n = 36$). Four institutions indicated they did not have a special education requirement. Eight institutions reported that their students were required to attend workshops about teaching special education students while thirteen institutions reported that a course preparing students to teach special education students was required in the music department. Twelve indicated that special education was a topic in music method classes. Others addressed special education topics through various means including guest lectures, reading music education journals, class assignments, and requiring special education accommodations in lesson plans.

When asked how many required courses in the undergraduate music education curriculum addressed topics about teaching special education students, nearly half reported only requiring one ($n = 23$) or two courses ($n = 19$) while 3.5% reported having no required courses ($n = 3$) as shown in Table 5. Almost 25% of the institutions stated that they required at least four courses that contain topics on teaching special education students. Seven were unsure how many required courses at their institution included special education topics.

Table 5

Number of Required Courses Containing Topics About Special Education (N = 85)

Number of Courses	Frequency	Percentage
Zero	3	3.5
One	23	27.1
Two	19	22.4
Three	13	15.3
Four	11	12.9
Five	2	2.4
Six or more	7	8.2
Not sure	7	8.2
Total	85	100.0

Sixty-eight institutions (80%) indicated music education majors are required to take courses provided outside the music department about teaching special education students. Those course names are presented in Table 6. The most common course name fell in the category of Exceptional Learners/Children ($n = 25$). The next two most frequent course names were Teaching Diverse Learners ($n = 9$) and Learning Theories ($n = 8$). A large majority of these courses are taught in the College of Education ($n = 37$). Five respondents reported that courses reside in the department of special education, four in psychology, two in College of Education and Psychology, two in College of Teaching and Learning, and one in Curriculum and Instruction, one in College of Health Sciences, and one in Specialized Education Services. Of those who provided the number of credit

hours for each course ($N = 56$), almost all reported three credit hour courses ($n = 53$).

The remaining three courses reported were worth two credit hours ($n = 1$), four credit hours ($n = 1$), and one credit hour ($n = 1$).

Table 6

Course Names of Required Special Education Courses Provided Outside Music ($N = 64$)

Name	Frequency
Exceptional Learners	25
Did Not Give Course Name	11
Teaching Diverse Learners	9
Learning Theories	8
Special Education	7
Inclusion	5
Educational Psychology/Growth & Development	3
Differentiation	2
Music for the Exceptional Child	1
Social Foundations of Education	1
English as a Second Language	1

Note. Respondents were allowed to write multiple responses for this question therefore the number of responses is greater than N .

The respondents reported the names of music courses that included topics on special education ($N = 47$). The most frequently cited course was general music ($n = 39$) followed by choral music methods ($n = 14$). Ten respondents reported that special education topics were included in introduction to music education, instrumental methods, and secondary music methods, while seven reported that a separate course entitled Music for Exceptional Learners addressed special education (refer to Table 7 for all results).

Table 7

Music Courses That Include Special Education Topics ($N = 47$)

Course	Frequency
General Music	39
Choral Music Methods	14
Introduction to Music Education	10
Instrumental Methods	10
Secondary Music Methods	10
Music for Exceptional Learners	7
Middle School Methods	3
Senior Seminar in Music Education	3
Teaching Vocal/General Music in	
Secondary	2
String Methods	2
Music Education Lab	2
Field Experience in Music	1

Table 7 (Continued)

Music Courses That Include Special Education Topics (N =47)

Course	Frequency
Music in American Society	1
Techniques of Classroom Instruments	1
Contemporary Practice in Music Education	1
Foundational Teaching Techniques in Music	1
Foundations of Teaching for Musical Understanding	1
Music Methods	1
Public School Music	1
Band Methods	1
Music Methods for High School	1
Secondary General/Band	1
Student Teaching	1

Note. Respondents were allowed to write multiple responses for this question therefore the number of responses is greater than *N*.

Only ten institutions (11.8%) responded that they provide a course dedicated to teaching music to special education students. At five of those institutions, the respondents reported that they teach the music special education course. At three institutions, a music therapy professor was responsible for teaching the course, and one

institution reported that a professor with both music education and music therapy credentials teaches the course. When asked to explain why a music-specific course on special education was not provided, the most frequent explanation was lack of room in the current music education curriculum ($n = 53$). Sixteen stated there was no one qualified to teach the course and 26 stated that such a course was not part of the state-mandated curriculum. Twenty-six institutions selected other reasons for not offering a music-specific special education course with the most common response being that special education topics were incorporated within music method courses ($n = 13$). These responses are displayed in Table 8.

Table 8

Other Reasons For Not Offering a Music-Specific Special Education Course ($n = 26$)

Reason	Frequency
Topic Incorporated in Music Method Classes	13
Course Provided in Education Department	10
Course Provided in Different Department	4
Course Provided in Psychology Department	1
Course Required By the State Not Music-Specific	1
Require Observations and Assignments During Student Teaching	1
Course Not Needed	1
Do Not Know	1

Note. Respondents were allowed to select multiple responses for this question therefore the number of responses is greater than n .

Not every institution had a respondent who supervises field experiences and student teachers therefore the data concerning field experiences and student teaching has a smaller total number of respondents. The respondents who supervise field experiences ($N = 74$) were requested to indicate what categories of special education students were present in their students' pre-service field experiences. The types of special education students most frequently reported were students with specific learning disabilities ($n = 54$), emotional disturbances ($n = 43$), autism ($n = 43$), and speech or language impairments ($n = 39$). Ten respondents were not sure what special education students were present in their students' pre-service field experience classrooms. All responses are displayed in Table 9.

Table 9

Categories of Special Education Students Present in Pre-Service Field Experiences
($N = 74$)

Category	Frequency	Percentage
Specific Learning Disabilities	54	73.0
Emotional Disturbance	43	58.1
Autism	43	58.1
Speech/Language Impairments	39	52.7
Orthopedic Impairments	31	41.9
Mental Retardation	29	39.2
Hearing Impairments	28	37.8
Other Impairments	17	23.0
Blindness	15	20.3
Do Not Know	10	13.5
None	0	0.0

Note. Respondents were allowed to select multiple responses for this question therefore the number of responses is greater than N .

The respondents ($N = 73$) were also asked to indicate the types of special education students present in their students' student teaching classes (see Table 10). The results were very similar to the categories of special education students present in pre-service field experiences. The four most frequently selected categories were identical: specific learning disabilities ($n = 57$), emotional disturbance ($n = 42$), autism ($n = 37$), and speech/language impairments ($n = 36$). Thirteen respondents did not know what categories of special education students were present in their students' student teaching classrooms, and only two indicated that no special education students were present.

Table 10

Categories of Special Education Students Present in Student Teaching Experiences
(*N* = 73)

Category	Frequency	Percentage
Specific Learning Disabilities	57	78.1
Emotional Disturbance	42	57.5
Autism	37	50.7
Speech/Language Impairments	36	49.3
Hearing Impairments	29	39.7
Orthopedic Impairments	28	38.4
Mental Retardation	26	35.6
Other Impairments	20	27.4
Blindness	19	26.0
Do Not Know	13	17.8
None	2	2.7

Note. Respondents were allowed to select multiple responses for this question therefore the number of responses is greater than *N*.

Research Question 2

For the data pertinent to research question two, there was a potential $N = 124$. The respondents ($N = 124$) were also asked to describe their own elementary/secondary teaching experiences. Two respondents reported having no experience teaching at the K-12 level and three reported less than two years of experience. Thirty-four respondents taught between two and five years while 44 taught for six to ten years. Twenty respondents taught K-12 for 11 to 15 years, 11 taught for 16 to 20 years, and 10 taught K-12 for over 20 years. While one respondent still teaches in a K-12 setting, another left the K-12 setting more than 50 years ago. For most, it has been 10-30 years since they taught in a K-12 setting. The full results are displayed in Table 11.

Table 11

When Respondents Left K-12 Teaching (N = 124)

Decade	Frequency	Percentage
1950-1959	1	0.8
1960-1969	4	3.2
1970-1979	9	7.3
1980-1989	23	18.5
1990-1999	30	24.2
2000-2009	48	38.7
2010-2012	3	2.4
Currently Teaching	1	0.8
No Experience	2	1.6
No Response	3	2.4
Total	124	100.0

The most frequently reported elementary/secondary areas taught were high school instrumental music ($n = 62$), elementary general music ($n = 58$), and middle/junior high instrumental music ($n = 56$). Other K-12 classes taught by respondents are displayed in Table 12.

Table 12

Respondents' K-12 Teaching Area (N = 124)

Teaching Area	Frequency	Percentage
High School Instrumental	62	50.0
Elementary General Music	58	46.8
Middle/Junior High		
Instrumental	56	45.2
Middle/Junior High General		
Music	41	33.1
High School Choral	39	31.5
Elementary Instrumental	37	29.8
Middle/Junior High Choral	37	29.8
Elementary Choral	27	21.8
High School General Music	22	17.7
Music Theory	2	1.6
Guitar	1	0.01
Art Appreciation	1	0.01
English	1	0.01
Geography	1	0.01
Music Composition	1	0.01
Orff-based System	1	0.01
K-12 general classroom	1	0.01
Music Substitute	1	0.01

Table 12 (Continued)

Respondents' K-12 Teaching Area (N = 124)

Teaching Area	Frequency	Percentage
Music for Diverse Needs	1	0.01
Choral and Band (did not specify level)	1	0.01

Note. Respondents were allowed to select multiple responses for this question therefore the number of responses is greater than *N* and the percentage is higher than 100%.

The respondents were asked to identify the types of special education students they had taught in elementary and secondary music classes (see Table 13). The most frequently identified categories of special education students taught were students with specific learning disabilities ($n = 97$), students with emotional disturbances ($n = 63$), and students with speech or language impairments ($n = 52$). Ten respondents reported they did not know what special education students had been in their K-12 classrooms. Nine respondents reported that there had been no special education students in their classes.

Table 13

Types of Special Education Students Respondents Taught in K-12 Setting (N = 124)

Category	Frequency	Percentage
Specific Learning		
Disabilities	97	78.2
Emotional Disturbance	63	50.8
Speech/Language		
Impairments	52	41.9
Autism	46	37.1
Hearing Impairments	45	36.3
Mental Retardation	45	36.3
Orthopedic Impairments	42	33.9
Blindness	31	25.0
Other	25	20.2
Do Not Know	10	8.1
None	9	7.3

Note. Respondents were allowed to select multiple responses for this question therefore the number of responses is greater than *N* and the percentage is higher than 100%.

The respondents ($N = 124$) were asked to rate on a 5-point Likert scale the extent to which they felt their pre-service institution prepared them to teach special education music students (1 = *no preparation*, 2 = *less than adequate*, 3 = *adequate*, 4 = *more than adequate*, 5 = *highly adequate*) ($M = 1.91$, $SD = 0.81$). More than seventy-five percent of the respondents indicated that their pre-service preparation in regards to teaching special

education students was either less than adequate ($n = 52$) or they received no preparation ($n = 43$). No respondent indicated their pre-service special education training was highly adequate and only three respondents felt their pre-service preparation was more than adequate. Twenty-one percent reported their pre-service training was adequate ($n = 26$).

When looking specifically at the types of special education training the respondents ($N = 124$) received during their pre-service training, 39 reported that they had taken a general education course that addressed special education. Only six respondents reported having taken a music education course in special education. More respondents reported having lectures on special education in music education courses ($n = 25$) than in general education courses ($n = 18$). Table 14 displays the full results.

Table 14

*Special Education Training Received By Respondents During Pre-Service Training
(N = 124)*

Type of Training	Frequency	Percentage
None	52	41.9
General Education course	39	31.5
Lecture in Music Education course	25	20.2
Conference Workshops	20	16.1
Lecture in General Education course	18	14.5
Field Observation in Special Education setting	16	12.9
Field Observation in Music Education setting	16	12.9
Field Experience in Music Education setting	15	12.1
Field Experience in Special Education setting	10	8.1
Other	7	5.6
Music Education course	6	4.8

Note. Respondents were allowed to select multiple responses for this question therefore the number of responses is greater than *N* and the percentage is higher than 100%.

The respondents were asked to describe any additional special education training they had received since their pre-service training. Twenty-nine percent indicated they had not had any additional special education training. For those who had received training, the two most frequently cited types were workshops ($n = 62$) and written materials ($n = 55$). Fourteen respondents reported that they had taken a college course outside the music department while 18 reported having taken a music course on teaching

special education students. Twenty respondents reported other types of training they had received (see Table 15); the most frequently cited “other” training was on-the-job experience ($n = 13$). One respondent elaborated:

I received a wonderful introduction to working with exceptional children from a group of teachers at one of my schools during my first year of teaching. The teachers of the ‘special learning center’ wanted their students to have music experiences and worked with me in helping to engage their students in a variety of ways. I learned a great deal from these teachers.

Not all respondents had this type of experience on the job. Another respondent explained it was “sink or swim. [I] taught in a K-12 district that was a center for special needs students and learned as I went.” Another described the experience as “guesswork and trial and error.”

Table 15

Responses for Additional Special Education Training (N = 124)

Type of Training	Frequency	Percentage
Attended workshops	62	50.0
Used written materials	55	44.4
None	36	29.0
Music course about special education	18	14.5
College course outside the music department	14	11.3
On the job experience/collaboration	13	10.5
Graduate course (did not specify type)	4	3.2
Music therapy classes	1	0.8
Personal research	1	0.8
Worked with leading researcher	1	0.8
Videos	1	0.8

Note. Respondents were allowed to select multiple responses for this question therefore the number of responses is greater than *N* and the percentage is higher than 100%.

Research Question 3

For the data pertinent to research question three, there was a potential $N = 124$. To discover if there was a relationship between the number of classes that address teaching special education students offered by an institution and the number of undergraduate music education students in a program, a chi-square analysis was undertaken. To complete this analysis, undergraduate music education enrollment was collapsed into two categories of nearly equally size: 60 or less undergraduate music education students (38) and more than 60 undergraduate music education students (39). The data for the number of classes containing special education topics were collapsed into two categories: zero to two courses (44) and three or more courses (33). The resulting analysis revealed a statistically significant positive relationship ($X^2 = 5.927$, $df = 1$, $p < 0.05$, $\Phi = 0.237$).

A chi-square analysis was done between the number of courses offered by an institution that addressed special education topics and the respondents' special education training. The data for the number of classes containing special education topics were again collapsed into two categories: zero to two courses (63) and three or more courses (48). There was a statistically significant positive relationship between the number of courses at an institution containing special education topics and respondents who had not received any undergraduate training in teaching special education students ($X^2 = 5.251$, $df = 1$, $p < 0.05$, $\Phi = 0.217$). Another statistically significant negative relationship occurred between the number of courses containing special education topics at an institution and if respondents took a music course about special education after completing their undergraduate training ($X^2 = 4.803$, $df = 1$, $p < 0.05$, $\Phi = -0.208$). A

negative relationship between an institution's number of courses that address special education topics and respondents who had a special education lecture or demonstration in an undergraduate music education class approached statistical significance ($X^2 = 3.675$, $df = 1$, $p = 0.055$, $\Phi = -0.182$). The researcher was unable to statistically analyze the relationship due to inadequate cell size in one or more cells between the number of courses that address special education topics and if a respondent had an undergraduate special education music course or a respondent had a field experience with special education students in a special education setting. There were no statistically significant relationships between the number of courses at an institution addressing special education topics and any of the other variables including the availability of a music therapy degree at an institution, state certification special education requirements, the number of years respondents' taught in K-12, or any of the other categories of types of special education training.

Research Question 4

For the data pertinent to research question four, there was a potential $N = 124$. A chi-square analysis revealed a statistically significant positive relationship between state teacher certification containing special education requirements and an institution requiring a special education course outside the music department ($X^2 = 11.891$, $df = 1$, $p < 0.001$, $\Phi = 0.388$). A positive relationship between state certification having special education requirements and an institution requiring field observations with special education students approached but was not statistically significance ($X^2 = 3.651$, $df = 1$, $p = 0.056$, $\Phi = 0.215$). There was no statistically significant relationship between the

number of undergraduate music education students and an institution requiring special education field observations, field experiences, requiring a general education special education class, or a music special education class. No significant relationship was found between an institution offering a music therapy degree program and requiring special education field experiences. All other relationships were unable to be statistically analyzed due to inadequate cell size in one or more cells.

Research Question 5

For data pertinent to research question five, there was a potential $N = 124$. A chi-square analysis was performed to examine if a relationship existed between the inclusion of special education topics in respondents' music method courses and respondents' personal experience teaching special education students in a K-12 setting. Only two variables revealed statistically significant positive relationships: respondents whose K-12 teaching experience included students with speech/language impairments ($X^2 = 4.036$, $df = 1$, $p < 0.05$, $\Phi = 0.180$) and respondents whose K-12 teaching experience included students with orthopedic impairments ($X^2 = 3.885$, $df = 1$, $p < 0.05$, $\Phi = 0.177$). All other categories of special education students that respondents' had teaching experience with did not have a statistically significant relationship with respondents including special education topics in their method courses.

A statistically significant positive relationship was found between respondents' inclusion of special education topics in their method classes and K-12 teaching experience for respondents whose experience included elementary general music ($X^2 = 11.482$, $df = 1$, $p < 0.01$, $\Phi = 0.304$) or elementary choral music ($X^2 = 5.194$, $df = 1$,

$p < 0.05$, $\Phi = 0.205$). Analysis revealed a statistically significant positive relationship between whether respondents included special education topics in their class curriculum and respondents' whose university teaching duties included an introduction to music education course ($X^2 = 6.622$, $df = 1$, $p < 0.01$, $\Phi = 0.231$) or elementary general music methods ($X^2 = 13.324$, $df = 1$, $p < 0.001$, $\Phi = 0.328$). A statistical analysis of respondents who taught special education topics in their method classes for respondents who taught elementary choral methods or preschool music methods was not able to be completed due to inadequate cell size in one or more cells.

A chi-square analysis revealed a statistically significant positive relationship between respondents who included special education topics in their method courses and respondents who had a special education lecture or demonstration in a music course during their undergraduate training ($X^2 = 4.120$, $df = 1$, $p < 0.05$, $\Phi = 0.182$). There was a statistically significant negative relationship between respondents who included special education topics in their method courses and respondents who did not received any additional special education training after their undergraduate career ($X^2 = 13.375$, $df = 1$, $p < 0.001$, $\Phi = -0.328$). There were also statistically significant positive relationships between respondents who included special education topics in their method courses and respondents whose special education training after their undergraduate career included special education workshops ($X^2 = 3.896$, $df = 1$, $p < 0.05$, $\Phi = 0.177$), or used written materials about special education ($X^2 = 18.471$, $df = 1$, $p < 0.001$, $\Phi = 0.386$). All other relationships between respondents who included special education topics in their method courses with categories of respondents' training were not statistically significant. There were also no statistically significant relationships between respondents' inclusion of

special education topics in their method courses and any of the following variables: respondents' years of experience teaching K-12, number of years respondents taught at the university level, or the availability of a music therapy program at an institution

Research Question 6

Respondents ($N = 85$) were asked if their institution had plans to add requirements about teaching special education students to the curriculum. Only 14 (16.5%) responded yes, while 59 (69.4%) stated there were no future plans. Twelve (14.1%) were unsure. Of the 14 respondents who indicated future plans, three stated that their institution's future plans included adding additional observation and/or field experience requirements. Others mentioned future additional requirements including the addition of a special education music course ($n = 3$), the addition of a special education course in the school of education ($n = 1$), and embedding special education topics within the current curriculum ($n = 7$). One respondent explained, "We are adding a graduate music therapy degree which will more than likely affect undergraduate classes." Another stated, "We are working with a doctoral student who is doing research on special learners. She assists with instrumental education, not choral. We hope to incorporate her dissertation work into our curriculum."

One respondent discussed the difficulty of adding additional curriculum requirements, lamenting "the extremely tight and demanding undergraduate music education curriculum at most universities make[s] it very difficult to increase course offerings in the area of special education or any other area." Another explained that "although there is a definite need to improve this area of the curriculum, our student

teachers typically deal with very few special education students and, therefore, more attention is directed at teaching academically gifted and talented students.”

Chapter V

Discussion

The purpose of this study was to examine how undergraduate music education programs prepare pre-service teachers to teach special education students in the music classroom. The researcher examined state, university, and department special education requirements, music education professors' teaching experience and training concerning special education students, and how music education professors incorporate special education topics in music method courses. The sample included 124 music education professors at 85 NASM accredited universities in the southern division of the NAFME.

Study Challenges

Several challenges surfaced during the execution of this study. The initial problem was determining whom to invite to participate. The researcher visited websites of each of the institutions in the sample to identify music education professors who teach method classes. This task proved difficult as not all of the faculty websites listed the courses that each professor taught. In those cases, the researcher had to use either titles or bibliographical information to try to identify music education professors. As a result, some faculty members at the targeted institutions may have been overlooked.

Another issue that emerged after data collection was the discrepancy in responses among professors at the same institution. At 29 institutions multiple faculty members responded to the survey. The most common disagreement among faculty members at the same institution was how many music education courses contained topics about teaching special education students ($n = 27$). In addition, there were disagreements about their

institution's requirements for preparing pre-service music teachers to teach special education students ($n = 26$). These discrepancies suggest a lack of communication among music education professors and a need for better coordination within their music education curriculum. It also suggests the need for periodic program evaluations to ensure all curriculum and state certification requirements are being met. Verrastro and Leglar (1992) addressed the need for systemic program review of music education teacher training programs to improve teacher education.

Verrastro and Leglar (1992) explained that most research in music teacher training has relied on a limited number of research designs; those most commonly being questionnaire surveys and quasi-experimental designs. In many studies using questionnaire surveys, the weaknesses include low return rates, failure to validate the instrument, and often the results are affected by factors outside the control of the teacher-training program such as the graduates' aptitude, motivation, and current teaching situation. In most studies that used a quasi-experimental design, the sample is one of convenience with the students being from one university. As a result, many studies using either a summative questionnaire or a quasi-experimental design are not generalizable. To overcome these flaws, Verrastro and Leglar (1992) recommend that studies be conducted utilizing a true experimental design and replicating studies to increase generalizability and to help control or identify unknown variables. They also suggest more research using qualitative methodology such as ethnography, which could assist in identifying factors that may affect the results of empirical studies.

Faculty members disagreed about whether their state required special education components for teacher certification. Of the 11 states in the sample, respondents from

institutions in only two states had complete agreement regarding special education requirements connected to teacher certification. These discrepancies illustrated a lack of knowledge on the part of music education professors about the specifics of state teacher certification. It also demonstrated a possible lack of communication between the state education department and teacher preparation programs. One reason for the lack of knowledge and communication might be the political nature of teacher certification requirements. State certification requirements are set by each state's legislative branch, and as the political agenda changes teacher certification requirements can change rapidly. Another reason might be that music education faculty are not receiving the most updated information since in most universities the teacher licensing unit is in the School of Education.

Because of the lack of agreement among respondents, the researcher investigated each state's special education requirements for teacher certification. Some states' requirements were very clear, whereas other states were not as specific. For example, Mississippi and Georgia require three semester hours in special education while Florida requires 15 semester credit hours covering a variety of subjects such as classroom management, human development and learning, educational assessment, and effective instructional strategies including the needs of special learners (General and Professional Preparation, 2006; Georgia Professional Standards Commission, 2008; Mississippi Department of Education, 2006). Tennessee requires teacher candidates to have field experiences in settings that include special needs students (Tennessee Department of Education, 2005). Virginia requires teacher candidates to meet requirements such as "the interaction of children with individual differences – economic, social, racial, ethnic,

religious, physical, and mental – should be incorporated to include skills contributing to an understanding of developmental disabilities and developmental issues...” (Regulations Governing the Review and Approval of Education Programs in Virginia, 2007, p. 38). Like Virginia, Kentucky gives a general standard labeled as diversity, which was defined as “...curriculum and experiences for candidates to acquire and apply the knowledge, skills, and dispositions necessary to help all students learn. These experiences include working with diverse higher education and school faculty, diverse candidates, and diverse students in P-12 schools” (Standards for Accreditation of Educator Preparation Units and Approval of Programs, 1998). Some discrepancies may be due to states having standards rather than required courses. Regardless of the challenges involved, it is important that institutions are aware and knowledgeable about teacher certification requirements, and that those requirements are being implemented within university music education programs. There is also a need for states to clearly communicate changes in certification requirements to those institutions and persons responsible for preparing future educators.

Summary of Findings and Discussion

In current K-12 schools, there is an ever-increasing need for music teachers to adapt instruction for special education students. This study sought to describe how university teacher preparation programs prepare future music educators for this aspect of their careers. It is important to keep several factors in mind when comparing the current study to previous research. This was the first study in nearly 15 years that examined from the perspective of the institution how universities and colleges prepare future music educators to successfully teach music to special education students. Previous research

included Heller (1994) who surveyed music education professors about special education teaching practices at institutions in the Midwest while Colwell and Thompson (2000) examined microfilm and online catalogues to investigate the inclusion of teaching special education in universities' music education curriculum. Studies that examined the problem from the perspective of K-12 music teachers about their special education training include Cooper (1999), Gfeller et al. (1990), Hahn (2010), Hammel (2001a), Hoffman (2011), and Shelfo (2007). Overall, research has found that music teachers believe that there is a need for more special education training in the pre-service curriculum, particularly hands-on field experience with special education students in music (Gfeller et al., 1990; Hahn, 2010; Hammel, 2001a).

In the present study, two-thirds of the institutions required a special education course provided outside of the music department. This supports earlier findings by Heller (1994) who reported 70% required a general special education course and Colwell and Thompson (2000) who reported 89% required a general special education course. But this finding is not consistent with previous research from the perspective of K-12 music teachers who reported the special education training they received during their undergraduate training. Hoffman (2011) reported 37% had taken an undergraduate course in special education for all subjects. Cooper (1999) reported 22% of music teachers had taken an undergraduate course on special education while Gfeller et al. (1990) reported 25% took a college course. This discrepancy may be due to when those music educators surveyed completed their pre-service training. The music teachers in Hoffman's 2011 study reported an average of 18 years of teaching experience, those in Cooper's (1999) study reported an average of 17 years of teaching experience, and in the

Gfeller et al. (1990) study, half the music teachers reported more than 10 years of teaching experience. The undergraduate special education requirements may have changed since the music teachers in Hoffman (2011), Copper (1999), and Gfeller et al. (1990) completed their undergraduate training.

The percentage of institutions in the current study that required field observations (59%) and field experiences (42%) that include special education students has increased since Heller's 1994 study where she reported that only 31% required field observations and 8.5% required field experiences. This increase in required field observations and field experiences with special education students is promising, as research has shown that music educators who have hands-on experience teaching special education students report an increase in their willingness to work with special education students, their comfort level, and their perceived ability to work with special education students (Smith & Wilson, 1999; VanWeelden & Whipple, 2007).

In the current study, 15% of the institutions required students to take a music special education course, while Heller (1994) reported 21% required a music special education course. This finding in the current study does support previous research regarding whether K-12 music teachers had taken a music special education course in college. Shelfo (2007) reported that 15% of music teachers in Maryland had taken a special education in music college course, and Hoffman (2011) reported 19% of music teachers had taken an undergraduate general special education course. It is encouraging in the current study that only four institutions (4.7%) reported not having any special education requirements. This is a dramatic decrease from Heller (1994) who reported 30% of teacher preparation institutions did not have any special education requirements.

This suggests that more institutions are realizing the importance of training future teachers how to teach special education students and are adapting by adding special education training into their curriculum.

Nearly 40% of the institutions reported that three or more required courses (music and/or general) contain special education topics. This is a large increase over the 11% reported by Heller (1994). On the other hand, at half of the institutions only one or two required courses contained special education topics and four percent reported that special education topics were not included in any required courses. It is evident from the disagreement among respondents from the same institution that they may not know the extent to which special education content is embedded in various classes, so this finding needs to be interpreted with caution. A small percentage (12%) reported that their institution had a music course specifically designed for the teaching of special education students, which is an increase from Heller's (1994) study who reported only 8.4% of institutions provided a music course about teaching special education students. This increase suggests more music teacher preparation programs are including special education training specifically tailored to the music classroom. In addition, a music course focusing on how to teach special education students is the type of training current K-12 music educators indicated was needed in the university curriculum (Hahn, 2010; Hammel, 2001a).

The type of special needs students that must be addressed in the K-12 classroom has changed in the past fifteen years. Seventy-eight percent of the institutions reported music education students' student teaching classrooms included students with specific learning disabilities and 73% of the institutions reported music education students' field

experiences included students with specific learning disabilities. This represents a decrease in both categories since Heller's (1994) findings (86% field experiences, 87% student teaching). Fifty-eight percent of the institutions reported field experiences included autistic children and 51% reported student teaching classrooms included autistic children. The presence of autistic children was not included in previous research (Heller, 1994). There was a decrease of the reported presence of mentally retarded children (39% field experiences, 36% student teaching) in the current study from Heller's (1994) findings (53% field experiences, 63% student teaching). These differences could be due to a growing knowledge and awareness of autism and learning disabilities in the last 15 years and how such students are identified and labeled. Over half the institutions reported field experience and student teaching classrooms included students with speech and language disabilities. This was a slight increase (49% field experience, 42% student teaching) from previous findings (Heller, 1994).

At 77% of the institutions, professors reported that they included lectures and readings on special education in their music method classes. The percentage of professors who required field observations (49%) and field experiences (43%) with special education students in a music class increased from Heller's (1994) findings of 31% required field observations and 8.5% required field experiences. This large increase in required field observations and experiences with special education students is supported by Hammel (2001a) who reported that Virginia music teachers who had the least amount of teaching experience (and most likely graduated in recent years) observed and taught special education students in pre-service field experiences more than those who had taught for several years.

Music education professors were requested to report how long they had taught at the university level and the music method classes that they taught. Almost 33% reported having taught at the university level for more than 20 years with nearly equal percentages (18-19%) having taught for 11-15 years, 6-10 years, or 2-5 years. This distribution of experience is very similar to earlier findings (Heller, 1994). The largest percentage of professors taught elementary general methods (45%), secondary instrumental methods (43%), and introduction to music education (38%). Even though the recipients were requested to report only methods classes they teach, many reported technique classes such as brass methods ($n = 3$) or conducting ($n = 2$). Some also reported philosophy or research-based classes such as foundations of music education ($n = 1$) or psychology of music ($n = 1$). It is evident that there is confusion among respondents about the definition of a methods class versus a technique class.

Forty-two percent of the music professors rated their pre-service special education training as less than adequate and 21% rated their training as adequate. No professor thought their pre-service special education training was highly adequate and only 2% rated their training more than adequate. These percentages were a decrease from Heller (1994) who found 10% reported their special education training as more than adequate and three percent reported their special education training was highly adequate. This disagreement could be due to the expanding and changing definition of special education and the greater inclusion of special education students in music classrooms. Thirty-five percent reported receiving no special education instruction during their pre-service education. This was a smaller percentage than reported in previous research (Heller, 1994) where 73% reported not having received any special education training.

The two most common types of special education training reported were having taken a general special education course (32%) and special education lectures in a music education course (20%). Seventy percent of respondents indicated having additional special education instruction since their pre-service training, a substantial increase from Heller's (1994) finding where only 45% of music education professors reported having had additional special education training since their pre-service education. Attending workshops (50%) and using written materials (44%) were the most frequently cited sources of additional training. This suggests that many respondents sought to learn more perhaps to overcome their lack of perceived inadequate special education training. Eleven percent of respondents reported on the job training as a source of additional special education knowledge with many elaborating the positives or negatives of this training. This might suggest that teaching how to teach special education students might be difficult in the confines of a collegiate classroom and emphasizes the need to include field experiences with special education students within those collegiate courses.

Several statistically significant relationships were found in the current study between professors' personal training experience with special education students and their inclusion of special education topics in the method courses they teach. There was only one statistically significant positive relationship found between faculty members' pre-service special education training, specifically faculty members who had lectures/demonstrations in a music education course during their pre-service training, and including special education topics in their methods classes ($p < 0.05$). However, there were three statistical significant relationships between professors' special education training since their pre-service education and their inclusion of special education topics in

their teaching. There was a statistically significant negative relationship between respondents' inclusion of special education topics in their method courses and respondents who did not receive any additional special education training since their undergraduate training ($p < 0.001$, $\Phi = -0.328$). The types of additional training that had statistically significant positive relationships with the inclusion of special education topics were professors who used written materials as additional training ($p < 0.001$, $\Phi = 0.386$), and professors who attended special education workshops ($p < 0.05$, $\Phi = 0.177$). It is not surprising that these types of additional training have a statistically significant relationship with professors including special education topics in their teaching because those professors who attended workshops, read articles and books, or took a graduate course were seeking to expand their knowledge and better prepare themselves as teachers to special education students. As a result, those professors who sought to improve their personal knowledge about special education students seem to be more likely to include topics about how to teach special education students to future music educators.

There was a statistically significant positive relationship found between professors who taught students with speech/language impairments during their K-12 teaching experience and professors' inclusion of special education topics ($p < 0.05$, $\Phi = 0.180$). Also, there was a statistically significant positive relationship found between respondents who taught K-12 students with orthopedic impairments and respondents who included special education topics in their methods courses ($p < 0.05$, $\Phi = 0.177$). It is possible the reason why those professors whose teaching experience included students with speech/language impairments or students with orthopedic impairments were more

likely to include special education topics is that both of those types of disabilities usually require accommodations that are tangible such as the Picture Exchange Communication System (PECS) or adapting the physical layout of the music classroom (Hammel & Hourigan, 2011b).

A statistically significant relationship was found between respondents including special education topics in their method courses and K-12 teaching experience for respondents whose experience included elementary general music ($p < 0.01$, $\Phi = 0.304$) or elementary choral music ($p < 0.05$, $\Phi = 0.205$). These statistically significant relationships could be a result of a greater number of special education students included in elementary general music and choir classes as those classes typically include all students regardless of musical ability. The professors who taught elementary general music or choir may have had more contact and interaction with special education students and as a result, included those experiences and knowledge in their method course teachings. Likewise, it was not surprising that there was a statistically significant relationship between respondents' whose teaching responsibilities included elementary general music methods classes and respondents' inclusion of special education topics in their music methods courses ($p < 0.001$, $\Phi = 0.328$). However, it is important to note that while these relationships were statistically significant, the magnetism of the phis was not very strong.

Future Research

Despite the increasing number of students with special needs who are mainstreamed in music classes, there had been little research regarding how music

teacher education programs are preparing future teachers for this aspect of their careers. While the current research makes a contribution to the field, many questions remain. Future research in music teacher preparation needs to include changes to the survey instrument used in the current study, replications of the current study, different research methodologies, and the investigation of the influence that music therapy programs might have on music education curriculum.

As Verrastro and Leglar (1992) stated, there is a need for replication in the research field of music teacher preparation. The current study needs to be replicated in other geographical locations of the country to provide more generalizable results.

The researcher suggests three changes to the survey instrument. First, changing the wording in the question about state certification requirements to make it more general, such as “does your state education department have requirements concerning teaching special education students for music teacher certification?” Second, the researcher suggests changing the wording in the question about university special education requirements to be more specific, such as “what requirements does your music education degree program have to prepare pre-service music educators to teach special education students?” Third, due to the confusion about what constitutes as a method course or a technique course, it would be helpful to provide a definition. These changes would provide more clarity and possibly generate more accurate and useful data.

Another way to investigate how institutions are preparing future music educators to teach special education students would be to request syllabi for elementary general music methods, instrumental methods, and choral methods and complete a course content analysis. It would be valuable to investigate institutions that do offer a music special

education course and examine how they fit such a course in the curriculum. A curriculum and course content analysis of institutions that offer a music course on teaching special education students would be beneficial. Case studies of those institutions that do offer a music special education course could offer detailed insight.

In addition, it would be prudent to evaluate how successful institutions are teaching future music educators how to teach music to special education students. Surveying music educators immediately after graduation about their experience, knowledge, and perceived level of ability to teach special education students would be valuable information and could address some of the factors Verrastro & Leglar (1992) pointed out as weaknesses in surveys such as participants' current teaching situation and years of experience. It would also be valuable to investigate what types of special education training and experience current music teachers wish they had received during their pre-service training. Also, surveying music educators about what in their pre-service training they felt prepared them to teach special education students could provide beneficial information and feedback for teaching institutions.

Due to the small number of institutions in this study that offered a music therapy degree, several statistical analyses could not be executed. Future research needs to examine how the presence of music therapy programs influences the preparation of future music educators to teach special education students. In addition, due to the confusion concerning state certification requirements, it would be beneficial to examine states' music teacher certification requirements in regards to special education.

It is important to note that though the current study took an important look at the training of music educators to teach special education students, the teaching of special

education students is a complex issue. Many other factors affect music educators' ability to successfully teach special education students such as the availability of institutional support in form of instructional aids, music teacher involvement in the placement of special education students, and the development of Individualized Educational Programs, and sufficient planning time to incorporate those IEPs.

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Appendix A – Music Education Professor Survey

Preparing Undergraduate Music Education Majors for Teaching Special

***1. Please identify whether your institution is public or private.**

- ☐ Public
☐ Private

***2. Please indicate the state where your institution is located.**

- ☐ Alabama
☐ Florida
☐ Georgia
☐ Kentucky
☐ Louisiana
☐ Mississippi
☐ North Carolina
☐ South Carolina
☐ Tennessee
☐ Virginia
☐ West Virginia

***3. Does your institution offer a degree in music therapy?**

- ☐ Yes
☐ No

***4. Does your state education department require a course in teaching special education students for teacher certification?**

- ☐ Yes
☐ No
☐ Not sure

Preparing Undergraduate Music Education Majors for Teaching Special

***5. How many undergraduate music education majors are enrolled at your university/college?**

- ☐ Fewer than 20
- ☐ 20-29
- ☐ 30-39
- ☐ 40-49
- ☐ 50-60
- ☐ More than 60
- ☐ Not sure

***6. What requirements does your university have to prepare pre-service music teachers to teach special education students? (please mark all that apply)**

- ☐ None
- ☐ Field-based observation
- ☐ Field-based experience (i.e. practicum, individual lessons, etc.)
- ☐ Attendance at workshops
- ☐ Required class(es) in special education outside the music department
- ☐ Required class(es) in special education within the music department
- ☐ Other (please specify)

***7. Does your program require students to enroll in courses provided outside the music education department that include topics related to special education?**

- ☐ Yes
- ☐ No
- ☐ Not sure

Preparing Undergraduate Music Education Majors for Teaching Special

8. Please list the course(s) name(s), number of credit hours, and the name of the department where the course(s) are provided.

***9. How many required courses in the undergraduate music education degree contain topics that address educating special education students?**

- ☐ None
- ☐ One course
- ☐ Two courses
- ☐ Three courses
- ☐ Four courses
- ☐ Five courses
- ☐ Six or more courses
- ☐ Not sure

10. What are the names of those courses that contain topics that address educating special education students?

***11. Does your music department provide a course on teaching music to special education students for undergraduate music education majors?**

- ☐ Yes
- ☐ No

Preparing Undergraduate Music Education Majors for Teaching Special

***12. Who has the responsibility for teaching the course about special education in the music class for undergraduate music education majors?**

- ☐ Myself
- ☐ Another music education professor
- ☐ Music therapy professor
- ☐ Professor who has credentials both in music education and music therapy
- ☐ Graduate assistant in music education
- ☐ Graduate assistant in music therapy
- ☐ Other (please explain)

***13. What is your department's reason(s) for not offering a course on teaching special education students in the music classroom? (mark all that apply)**

- ☐ No one qualified to teach the course
- ☐ No room to include it in the current music education curriculum
- ☐ Not part of state mandated curriculum for license
- ☐ Other (please specify)

***14. Looking back at your preservice teacher training, to what extent did you feel that your preservice institution prepared you to teach special education/special needs music students?**

- ☐ No preparation
- ☐ Less than adequate
- ☐ Adequate
- ☐ More than adequate
- ☐ Highly adequate

Preparing Undergraduate Music Education Majors for Teaching Special

***15. How were you trained to work with special education/special needs students in your preservice teacher program? (please mark all that apply)**

- ☐ Received no training
- ☐ Course on exceptional students provided in a general education course
- ☐ Course on exceptional students provided by the music department
- ☐ Lecture/demonstration in a general education course
- ☐ Lecture/demonstration in a music education course
- ☐ Field-based observations of special education students in a special education classroom
- ☐ Field-based observations of special education students in the music classroom
- ☐ Field-based experiences with special education students in a special education classroom
- ☐ Field-based experiences with special education students in the music classroom
- ☐ Attendance at conference sessions addressing the topic of special education students in the music classroom
- ☐ Other (please specify)

***16. If you have received any additional training in working with special education/special needs students since completing your preservice music teacher training program, please mark all that apply.**

- ☐ None
- ☐ Course on exceptional students provided outside of the music department
- ☐ Course on exceptional students provided by the music department
- ☐ Workshops
- ☐ Written materials (articles, books)
- ☐ Other (please specify)

Preparing Undergraduate Music Education Majors for Teaching Special

*17. How many years did you teach in a K-12 school system?

- ☐ Zero years
- ☐ Fewer than 2 years
- ☐ 2-5 years
- ☐ 6-10 years
- ☐ 11-15 years
- ☐ 16-20 years
- ☐ More than 20 years

*18. What was your teaching area(s) when you taught K-12 music? (please mark all that apply)

- ☐ Elementary general music
- ☐ Elementary choral music
- ☐ Elementary instrumental music
- ☐ Middle/Junior High general music
- ☐ Middle/Junior High choral music
- ☐ Middle/Junior High instrumental music
- ☐ High school general music
- ☐ High school choral music
- ☐ High school instrumental music
- ☐ Other (please specify)

Preparing Undergraduate Music Education Majors for Teaching Special

***19. What categories of special education/special needs students were present in your music classes? (please mark all that apply)**

- ☐ Specific learning disabilities
- ☐ Speech or language impairments
- ☐ Hearing impairments
- ☐ Mental retardation
- ☐ Emotional disturbance
- ☐ Autism
- ☐ Orthopedic impairments
- ☐ Blindness
- ☐ Other impairments
- ☐ None
- ☐ Do not know

***20. What year did you leave K-12 music teaching?**

***21. How many years have you taught college/university level music education classes?**

- ☐ Fewer than 2 years
- ☐ 2-5 years
- ☐ 6-10 years
- ☐ 11-15 years
- ☐ 16-20 years
- ☐ Over 20 years

Preparing Undergraduate Music Education Majors for Teaching Special

**22. What methods courses do you teach for undergraduate music education majors?
(please mark all that apply)**

- ☐ Introductory music education
- ☐ General methods for all majors
- ☐ Elementary general music methods
- ☐ Elementary choral methods
- ☐ Preschool music methods
- ☐ Secondary choral methods
- ☐ Secondary general music methods
- ☐ Secondary instrumental methods
- ☐ Other (please describe)

***23. Do any of the courses that you teach for undergraduate music education majors
contain topics on teaching special education students?**

- ☐ Yes
- ☐ No

Preparing Undergraduate Music Education Majors for Teaching Special

24. How is the topic of teaching special education students incorporated in your course(s) for undergraduate music education majors? (mark all that apply)

- ☐ Lectures
- ☐ Guest lectures
- ☐ Recorded presentations
- ☐ Required readings
- ☐ Classroom demonstration of techniques
- ☐ Field-based observations of special education students in special education setting
- ☐ Field-based observations of special education students in regular music classroom
- ☐ Field-based experience with special education students in special education setting
- ☐ Field-based experience with special education students in regular music classroom

Other (please explain)

***25. Do you supervise pre-student teaching field-based experiences?**

- ☐ Yes
- ☐ No

Preparing Undergraduate Music Education Majors for Teaching Special

***26. What categories of special education students have been present in the classrooms where your pre-service students are placed?**

- ☐ Specific learning disabilities
- ☐ Speech or language impairments
- ☐ Hearing impairments
- ☐ Mental retardation
- ☐ Emotional disturbance
- ☐ Autism
- ☐ Orthopedic impairments
- ☐ Blindness
- ☐ Other impairments
- ☐ None
- ☐ Do not know

***27. Do you supervise student teachers?**

- ☐ Yes
- ☐ No

Preparing Undergraduate Music Education Majors for Teaching Special

***28. What categories of special education students have been present in the classrooms where your student teachers are placed? (please mark all that apply)**

- ☐ Specific learning disabilities
- ☐ Speech or language impairments
- ☐ Hearing impairments
- ☐ Mental retardation
- ☐ Emotional disturbance
- ☐ Autism
- ☐ Orthopedic impairments
- ☐ Blindness
- ☐ Other impairments
- ☐ None
- ☐ Do not know

***29. Is your music department planning to implement any additional requirements to prepare undergraduate music education majors to teach special education students?**

- ☐ Yes
- ☐ No
- ☐ Not sure

30. If Yes, please provide a brief description of future requirements in the space below.

31. Thank you for participating in this survey. If you would like to receive the results from this survey, please leave your contact information below.

Appendix B – Institutional Review Board Documents of Approval



INDIANA UNIVERSITY OFFICE OF RESEARCH ADMINISTRATION

To: LISSA FLEMING MAY
MUSIC

From: IU Human Subjects Office
Office of Research Administration – Indiana University

Date: April 25, 2012

RE: EXEMPTION GRANTED

Protocol Title: Preparing Undergraduate Music Education Majors for Teaching Special Education Students: A Survey of Teaching Institutions

Protocol #: 1204008532

Funding Agency/Sponsor: None

IRB: IRB-IUB, IRB00000222

Your study named above was accepted on April 25, 2012 as meeting the criteria of exempt research as described in the Federal regulations at 45 CFR 46.101(b), paragraph(s) (2) . This approval does not replace any departmental or other approvals that may be required.

As the principal investigator (or faculty sponsor in the case of a student protocol) of this study, you assume the following responsibilities:

Amendments: Any proposed changes to the research study must be reported to the IRB prior to implementation. To request approval, please complete an Amendment form and submit it, along with any revised study documents, to irb@iu.edu. Only after approval has been granted by the IRB can these changes be implemented.

Completion: Although a continuing review is not required for an exempt study, you are required to notify the IRB when this project is completed. In some cases, you will receive a request for current project status from our office. If we are unsuccessful at in our attempts to confirm the status of the project, we will consider the project closed. It is your responsibility to inform us of any address changes to ensure our records are kept current.

Per federal regulations, there is no requirement for the use of an informed consent document or study information sheet for exempt research, although one may be used if it is felt to be appropriate for the research being conducted. As such, these documents are returned without an IRB-approval stamp. Please note that if your submission included an informed consent statement or a study information sheet, the IRB requires the investigational team to use these documents.

You should retain a copy of this letter and any associated approved study documents for your records. Please refer to the project title and number in future correspondence with our office. Additional information is available on our website at <http://researchadmin.iu.edu/HumanSubjects/index.html>.

If you have any questions, please contact our office at the below address.

Thank you.

INDIANA UNIVERSITY INSTITUTIONAL REVIEW BOARD (IRB)
DOCUMENTATION OF REVIEW AND APPROVAL (DRA)

Reviewing IRB (please choose one):

IRB STUDY NUMBER: _____

Biomedical: ☐ IRB-02 ☐ IRB-03 ☐ IRB-04 ☐ IRB-05
Behavioral: ☐ IRB-01 ☒ IUB IRB

Please type only in the gray boxes. To mark a box as checked, double-click the box, select "checked", and click "OK".

SECTION I: INVESTIGATOR INFORMATION

Principal Investigator:

Name (Last, First, Middle Initial): Dr. Lissa Fleming May

Department: Music Education

Phone: [REDACTED]

E-Mail: _____

Fax: [REDACTED]

Address: 1201 E. 3rd Street Bloomington, IN 47405

Additional Study Contact:

Name: Meredith Petersen

Phone: _____

Student Contact, if this is a student protocol: _____

Phone: _____

Email: _____

Project Title: Preparing Undergraduate Music Education Majors for Teaching Special Education Students: A Survey of Teaching Institutions

Sponsor/Funding Agency: _____

PI on Grant: _____

Sponsor Protocol #/Grant #: _____

Period: from: _____ to _____

Sponsor Type: ☐ Federal ☐ State ☐ Industry ☐ Not-for-Profit ☒ Unfunded ☐ Internally Funded

Funding Status: ☐ Pending ☐ Funded ☒ N/A

Grant Title (if different from project title): _____

SECTION II: TYPE OF REVIEW

☒ Exempt Review

☐ Expedited Review

☐ Full Board Review (Choose One) → ☐ Behavioral: ☐ IRB-01 ☐ IU Bloomington IRB

☐ Biomedical: ☐ IRB-02 ☐ IRB-04 ☐ IRB-05

SECTION III: DOCUMENTS INCLUDED WITH RESEARCH SUBMISSION

☐ Assent, dated: _____

Number of assent documents: _____

☐ Authorization, dated: _____

Number of authorizations: _____

☐ Clinical Investigator's Brochure, dated: _____

☐ Expedited Research Checklist, dated: _____

☒ Exempt Research Checklist, dated: 4-19-12

☐ HIPAA & Recruitment Checklist, dated: _____

☐ Informed Consent, dated: _____

Number of consent documents: _____

☐ Protocol, dated: _____

☒ Recruitment materials (please list and date): initial email, follow-up email, 2nd follow-up email will be sent 4/19/12

☐ Request form(s) for vulnerable population(s) (please list and date): _____

☒ Surveys, questionnaires (please list and date): Survey 4-19-12

☐ Summary Safeguard Statement or HUD Form, dated: _____

☒ Study Information Sheet

☒ Other (please list and date): Investigator List

SECTION IV: INVESTIGATOR STATEMENT OF COMPLIANCE

By submitting this form, the Principal Investigator assures that all information provided is accurate. He/she assures that procedures performed under this project will be conducted in strict accordance with federal regulations and Indiana University policies and procedures that govern research involving human subjects. He/she acknowledges that he/she has the resources required to conduct research in a way that will protect the rights and welfare of participants, and that he/she will employ sound study design which minimizes risks to subjects. He/she agrees to submit any change to the project (e.g. change in principal investigator, research methodology, subject recruitment procedures, etc.) to the Board in the form of an amendment for IRB approval prior to implementation.

SECTION V: IRB APPROVAL

This research project, including all documents included with the submission (e.g., informed consent statement, authorization, and/or waiver of authorization) has been reviewed and approved by the Indiana University IRB for a maximum of a one year period unless otherwise indicated as follows: _____

- ☐ Exempt Category(ies), if applicable: _____
☐ Expedited Category(ies), if applicable: _____

Authorized IRB Signature: _____ IRB Approval Date: _____

Printed Name of IRB Member: _____



INDIANA UNIVERSITY

OFFICE OF RESEARCH ADMINISTRATION

To: LISSA FLEMING MAY
MUSIC

From: IU Human Subjects Office
Office of Research Administration – Indiana University

Date: May 23, 2012

RE: NOTICE OF EXPEDITED APPROVAL - AMENDMENT

Protocol Title: Preparing Undergraduate Music Education Majors for Teaching Special Education Students: A
Survey of Teaching Institutions

Protocol #: 1204008532

Funding Agency/Sponsor: None

IRB: IRB-IUB, IRB00000222

An amendment to your above-referenced protocol was approved by the Institutional Review Board on May 23, 2012. The protocol meets the requirements for expedited review pursuant to §46.110(b)(2). The changes described in the amendment can now be implemented, unless any departmental or other approvals are required.

If you submitted a revised informed consent document a copy of the approved stamped document is enclosed and must now be used.

You should retain a copy of this letter and any associated approved study documents for your records. All documentation related to this protocol must be maintained in your files for audit purposes for at least three years after closure of the research; however, please note that research studies subject to HIPAA may have different requirements regarding file storage after closure. Additional information is available on our website at <http://researchadmin.iu.edu/HumanSubjects/index.html>. If you have any questions, please contact our office at the below address.

Thank you.

INDIANA UNIVERSITY INSTITUTIONAL REVIEW BOARD (IRB)
STUDY AMENDMENT

Reviewing IRB (please choose one):

Biomedical: ☐ IRB-02 ☐ IRB-03 ☐ IRB-04 ☐ IRB-05
Behavioral: ☐ IRB-01 ☒ IUB IRB

IRB STUDY NUMBER: 1204008532
AMENDMENT NUMBER: Item 002 A001

Please type only in the gray boxes. To mark a box as checked, double-click the box, select "checked", and click "OK".

SECTION I: INVESTIGATOR INFORMATION

Principal Investigator:

Name (Last, First, Middle Initial): Dr. Lissa Fleming May

Department: Music Education

Phone: [REDACTED]

E-Mail: [REDACTED]

Additional Study Contact:

Name: Meredyth Petersen

Phone: [REDACTED]

E-Mail: [REDACTED]

Project Title: **Preparing Undergraduate Music Education Majors for Teaching Special Education Students: A Survey of Teaching Institutions**

Sponsor/Funding Agency: _____ Sponsor Number. _____

Sponsor Amendment Number. _____

SECTION II: STUDY INFORMATION

This study is:

- ☒ Open to enrollment
☐ Closed to enrollment

Number of active subjects: 0

SECTION III: AMENDMENT DESCRIPTION

1. Provide a complete description of the proposed change(s) included in this amendment:
The survey has been modified to clarify wording and reduce the number of question. The number of participants has been increased to 386.
2. State the justification/rationale for this amendment. If risks are being updated, please provide specific justification:
The survey was modified to reduce the survey length and to clarify wording. The number of participants was increased to include the entire population.
3. Is the study sponsored?
☒ No.
☐ Yes. Check the appropriate line below and provide with this amendment, as applicable:
☐ A copy of the sponsor's amendment, if the amendment came from the sponsor.
☐ A copy of your notice to the sponsor of this change, if you initiated the amendment.
☐ A copy of the approved amendment will be sent to the sponsor.
☐ None of the above apply. Please explain: _____
4. Do the proposed change(s) described in this amendment alter the risk to benefit assessment?
☒ No.
☐ Yes. Please describe how the assessment is altered: _____
5. Do the proposed change(s) described in this amendment require changes to the informed consent and/or assent document(s) or process?
☐ N/A. Informed consent, written documentation of informed consent, and/or assent has been waived for this study. Skip to item 6 below.
☒ No. Skip to item 6 below.
☐ Yes. Answer items A and B below.

IRB Form v02.01.2012

- A. Check the appropriate line below.
- ☐ The new informed consent and/or assent document(s) are in addition to the current one(s).
- ☐ The new informed consent and/or assent document(s) replace the current one(s).
If there are multiple consent and/or documents for this study, please indicate which consent and/or assent document(s) are to be replaced. _____
- ☐ N/A. Changes are being made to the informed consent process only and informed consent document(s) will not change.
- B. Will enrolled subjects be informed of the change(s) described in this amendment?
- ☐ No. Please explain why not: _____
- ☐ Yes. Will enrolled subjects be re-consented and/or re-assented?
- ☐ Yes.
- ☐ No. Please explain how enrolled subjects will be notified: _____

SECTION IV: CO-INVESTIGATOR UPDATE

- ☒ This submission does NOT include additions or removals to the Investigator List. *Proceed to Section V.*
- ☐ This submission includes additions or removals to the Investigator List. The updated Investigator List is attached.

The following investigators are being added to the current Investigator List:

The following investigators are being **removed** from the Investigator List and will no longer be participating in this research:

SECTION V: AMENDMENT SUMMARY

Amendment includes:

- | | |
|--|---|
| <input type="checkbox"/> Assent, dated: _____ | <input type="checkbox"/> Investigator List, dated: _____ |
| Number of assent documents: _____ | <input type="checkbox"/> Protocol, dated: _____ |
| <input type="checkbox"/> Authorization, dated: _____ | <input type="checkbox"/> Recruitment materials (please list and date): _____ |
| Number of authorizations: _____ | <input type="checkbox"/> Request form(s) for vulnerable population(s) (please list and date): _____ |
| <input type="checkbox"/> Clinical Investigator's Brochure, dated: _____ | <input checked="" type="checkbox"/> Surveys, questionnaires (please list and date): <u>5-17-12</u> |
| <input type="checkbox"/> Expedited Research Checklist, dated: _____ | <input type="checkbox"/> Summary Safeguard Statement or HUD Form, dated: _____ |
| <input checked="" type="checkbox"/> Exempt Research Checklist, dated: <u>5-17-12</u> | <input type="checkbox"/> Study Information Sheet |
| <input type="checkbox"/> HIPAA & Recruitment Checklist, dated: _____ | <input type="checkbox"/> Other (please list and date): _____ |
| <input type="checkbox"/> Informed Consent, dated: _____ | |
| Number of consent documents: _____ | |

NOTE: Only documents that are being changed as a result of the amendment should be attached and checked in items 6 above. Listing document dates are optional and only necessary if required by the investigator or sponsor.

NOTE TO INVESTIGATORS: Study amendments may not be instituted until approval from the IRB is given.

Please indicate the type of amendment you are submitting. Please see the Guidelines for Determining an Amendment Type available on the IU Human Subjects Office website for additional information. **Please note that the IRB makes the final determination with regard to whether or not the amendment is acceptable for expedited review or if it requires review at a convened IRB meeting.**

- ☒ **Minor Amendment.** Change(s) do not significantly affect the safety of subjects and is acceptable for expedited review per 45 CFR 46.110(b)(2)/21 CFR 56.110(b)(2).
- ☐ **Major Amendment.** Changes potentially involve increased risks or discomforts or decrease potential benefit. The amendment requires review at a convened IRB meeting.

SECTION VI: INVESTIGATOR STATEMENT OF COMPLIANCE

By submitting this form, the Principal Investigator assures that all information provided is accurate. He/she assures that procedures performed under this project will be conducted in strict accordance with federal regulations and Indiana University policies and procedures that govern research involving human subjects. He/she acknowledges that he/she has the resources required to conduct research in a way that will protect the rights and welfare of participants, and that he/she will employ sound study design which minimizes risks to subjects. He/she agrees to submit *any* change to the project (e.g. change in principal investigator, research methodology, subject recruitment procedures, etc.) to the Board in the form of an amendment for IRB approval prior to implementation.

SECTION VII: IRB APPROVAL

This amendment, including documentation noted above, has been reviewed and approved by the Indiana University IRB as meeting the criteria for IRB approval as outlined in 45 CFR 46.111(a). I agree with the investigator's assessment above regarding whether the amendment is a minor or major amendment, unless otherwise noted.

Authorized IRB Signature: _____ IRB Approval Date: May 23, 2012 _____

Printed Name of IRB Member: Senta K Baker _____

Appendix C – First Email to Music Education Professors in the Sample

Dear Music Education Professor,

Hello, my name is Meredyth Petersen and I am a Masters of Music Education student at the Jacobs School of Music at Indiana University. Previous to my time here, I was a middle school band director in Virginia, and I hope to continue teaching middle school band after I complete my degree.

During my coursework, I have become very interested in music teacher preparation. In particular, due to my personal experiences, I am interested in how pre-service music teachers are prepared to teach special education students who are integrated in the music classroom. Therefore, I am working on a master's thesis entitled "Preparing Undergraduate Music Education Majors for Teaching Special Education Students: A Survey of Teaching Institutions." It is my hope that the results of this study will offer valuable information about the current teaching practices concerning special education that are occurring in music teacher preparation programs.

I am contacting you because you are a music education professor at a NASM-accredited school in the southern district of the National Association for Music Education. I hope to gather information about the courses on special education available to undergraduate music education majors. Your input is important to this research.

Please follow the link below to an online survey. The survey should take about ten to fifteen minutes to complete. Your information will remain completely confidential and will be used for research purposes only. If you prefer to receive a paper copy of the survey, please let me know and I will mail you a copy.

If you would like more information about my research or results, I would be happy to answer any questions you may have.

Thank you for your time and assistance.

Sincerely,

Meredyth Petersen
Jacobs School of Music
Indiana University

Appendix D – Second Email to Music Education Professors in the Sample

Dear Music Education Professor,

Hello, my name is Meredyth Petersen and I am a Masters of Music Education student at the Jacobs School of Music at Indiana University. I contacted you a few days ago regarding the study I am conducting entitled “Preparing Undergraduate Music Education Majors for Teaching Special Education Students: A Survey of Teaching Institutions.”

I wanted to send a follow-up email to you because you have not yet completed the online survey that I sent. I understand how busy you must be. Please consider taking a few minutes to complete the online survey. I have included a link below.

If you prefer to receive a paper copy of the survey, I would be happy to mail this to you. Please let me know if you have any questions regarding the research. I truly appreciate your help with this matter.

Thank you for your time and consideration.

Sincerely,

Meredyth Petersen
Jacobs School of Music
Indiana University

Appendix E – Third Email to Music Education Professors in the Sample

Dear Music Education Professor,

Hello, my name is Meredyth Petersen and I am a Masters of Music Education student at the Jacobs School of Music at Indiana University. I contacted you a couple of weeks ago regarding the study I am conducting entitled “Preparing Undergraduate Music Education Majors for Teaching Special Education Students: A Survey of Teaching Institutions.”

I wanted to send a follow-up email to you because you have not yet completed the online survey that I sent. I understand how busy you must be. Please consider taking a few minutes to complete the online survey. I have included a link below.

If you prefer to receive a paper copy of the survey, I would be happy to mail this to you. Please let me know if you have any questions regarding the research. I truly appreciate your help with this matter.

Thank you for your time and consideration.

Sincerely,

Meredyth Petersen
Jacobs School of Music
Indiana University