PERCEPTIONS OF PRESERVICE MUSIC EDUCATORS CONCERNING THEIR PREPARATION TO TEACH STUDENTS WITH EXCEPTIONALITIES

By

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A THESIS

Submitted to Michigan State University in partial fulfillment of the requirements for the degree of

Music Education – Master of Music

ABSTRACT

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The purpose of this study was to examine the impact of teaching practices in higher education on the perceptions of students in those programs of their preparation to work with students with exceptionalities. I collected data from undergraduate music education students attending institutions in the Big 10 Conference who were student teaching during the spring semester of the 2014-2015 academic year. I collected data using a researcher-generated questionnaire informed by the survey tools used in the related research. I analyzed the data using descriptive statistics, frequency distributions, *t* tests, and ANOVA. I calculated reliabilities using Cronbach's alpha.

The results suggest that the majority of respondents felt adequately prepared to teach students with exceptionalities; however, the degree of preparation varied. There were statistically significant differences between respondents who had personal experiences with individuals with exceptionalities and those who did not have personal experiences with individuals with exceptionalities, as well as respondents who participated in coursework pertaining to the education of students with exceptionalities and those who did not participate in such coursework. Trends in differences between teaching area and teaching level preference groups suggest that preparation may vary by specialization; however small sample size may have attenuated statistical significance. The results suggest a need for more interactions between preservice music educators and students with exceptionalities, as well as a sequenced approach to teaching music educators about exceptional learners. Copyright by ASHLEY GRACE MOSS 2015 Dedicated to my mentors, Dr. Kristyn Kuhlman and Mrs. Connie Starmer.

ACKNOWLEDGMENTS

A number of individuals have provided a great deal of support in the preparation and pursuit of my Masters degree. My sincerest thanks to my adviser and committee chair, Dr. Cynthia Crump Taggart, for her critical eye, knowledge, and patience as I learned how to navigate the world of research. I extend my thanks to my committee members, Dr. Judy Palac and Dr. Bruce Taggart, who brought intuition, inquisitiveness, and passion to my committee. I also extend my deepest appreciation to Dr. Kristyn Kuhlman, without whom this opportunity would not have been possible.

I extend a special thanks to my family and friends for supporting me as I pursued this degree. I am thankful for my parents, Charles and Debra Moss, who allowed me to pursue my dreams, no matter the cost, and taught me the value of hard work and determination. Most of all, I am thankful for elementary general music teacher, Connie Starmer, for introducing me to the gloriousness of music teaching, and showing me what it means to be a caring, compassionate educator.

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CHAPTER 1

INTRODUCTION

Educating Students with Exceptionalities: Fifty Years in Review

A Blueprint for Reform: The Reauthorization of the Elementary and Secondary Education Act (U.S. Department of Education, 2010a) opens with a declaration: "Every child in America deserves a world-class education" (pg. 1). The Elementary and Secondary Education Act (ESEA), which passed in 1965, advocated the importance of "a complete education," as well as equity and opportunity for all students, including those with exceptionalities. As one of the first pieces of legislation to address the educational needs of children with exceptionalities¹ directly, this act, coupled with the State Schools Act (P.L. 89-10), provided states with grant assistance to educate students with exceptionalities (U.S. Department of Education, 2010b). As time moved on, additional legislation, as well as landmark court cases, propelled the education of students with exceptionalities forward; however it was the passing of the Education for All Handicapped Children Act (P.L. 94-142) in 1975 that finally granted them full access to public education.

Public Law 94-142 dramatically changed the way in which the United States educates children with exceptionalities. The passing of the law guaranteed these students access to a "free appropriate public education that emphasizes special education and related services designed to meet their unique needs" (U.S. Department of Education, 2010b, p. 5). In addition, it assured (a) that the rights of students and parents are protected, (b) that states and school districts have the resources to provide for students with exceptionalities, and (c) that assessments be developed to

¹ For the purpose of this paper, *children with exceptionalities* or *students with exceptionalities* can be defined as "a child with mental retardation, hearing impairments (including deafness), speech or language impairments, visual impairments (including blindness), serious emotional disturbance, orthopedic impairments, autism, traumatic brain injury, or other health impairments, specific learning disabilities, or any other condition requiring the student to receive academic assistance" (Individuals with Disabilities Education Act, 2004, p. 31).

evaluate the effectiveness of efforts to educate students with exceptionalities (Education for All Handicapped Children Act, 1975).

In the 40 years since its passing, P.L. 94-142 has been amended four times, and in 1990, it was renamed the *Individuals with Disabilities Education Act (IDEA)*. The most recent reauthorization, issued in 2004, reinforced the original expectations and established the following: (1) The *Zero Reject Principle*, requiring public schools to provide students with exceptionalities within their jurisdiction equal access to educational opportunities; (2) *Nondiscriminatory evaluations*, requiring a thorough examination of students' abilities across a number of criteria prior to providing services; (3) *Individualized education programs (IEPs)*² that are aligned with federal and state education standards and tailored to the needs and abilities of the student; (4) education of students with exceptionalities within the *least restrictive environment (LRE)*³ as determined by the special education committee; (5) *Procedural due process*, the legal mechanism required for enforcing the aforementioned principles; and (6) The *parent participation principle*, dictating that the education of the child should be a partnership between parents and school officials (Individuals with Disabilities Education Act, 2004;

Turnbull, Stowe, & Hureta, 2007).

² *Individualized education programs (IEPs)* are written documents for students with exceptionalities containing the students' present performance levels (academic and functional skills), measureable annual goals, documentation of progress toward the goals, modifications, accommodations, and services necessary to support student growth, and a rationale for inclusion or exclusion of students from specific school activities (Individuals with Disabilities Education Act, 2004).

³ For the purpose of this paper, *least restrictive environment (LRE)* may be defined as the placement of a student with exceptionalities into an educational setting that will ensure the greatest opportunity for the student to achieve the goals set forth in the IEP, without negatively impacting the learning of the child with exceptionalities or his peers (Individuals with Disabilities Education Act, 2004).

Since the passing of IDEA in 1975, the number of students with exceptionalities served under the law has increased. According to Atterbury, national annual reports on the education of students with exceptionalities indicated "that special education services have expanded far beyond the boundaries envisioned by the framers of P.L. 94-142" as far back as 1993 (1993, p. 22). Although the number of students served under IDEA has decreased slightly over the past decade, recent reports indicate that 13.0% of students aged 3 to 21 enrolled in education programs during the 2010-2011 academic year received services under the act (Snyder & Dillow, 2013).

According to the *Digest of Education Statistics* (2013), IDEA served 1.46% of children aged 3 to 5 residing within the United States during the 2010-2011 academic year. Unfortunately, this document does not provide a breakdown of specific enrollment information for this age group. In the same year, IDEA served 11.54% of children aged 6 to 21 residing within the United States. Of the 5,699,061 children in this age range served, 94.8% participated in traditional classroom settings for at least part of the academic day. Specifically, 60.5% of students served participated in a traditional classroom settings for at least 80% of the school day, 20.1% participated for between 40% and 79% of the school day, and 14.2% participated for less than 40% of the school day. Only 5.3% of students with exceptionalities engaged in instruction in alternative educational environments such as residential facilities and schools for students with exceptionalities (Snyder & Dillow, 2013).

Educating Students with Exceptionalities

The *Individuals with Disabilities Education Act* requires that students with exceptionalities be educated in the least restrictive environment (LRE). As a result, many children with exceptionalities now are taught in regular classroom environments. Prior to the

most recent iteration of IDEA, the act of placing a child within the LRE was known as mainstreaming, an educational practice in which individuals with exceptionalities received instruction in the traditional classroom setting, but did not necessarily receive instruction tailored to their specific needs. The reauthorization of IDEA in 2004 clarified the practice of placing students within the LRE, transitioning from the term "mainstreaming" to "inclusion." In an inclusive setting, teachers attempt "to educate all students in the regular classroom by providing them with the support they require rather than sending them to another classroom to receive services" (Hahn, 2010), modifying and adapting instruction to suit every individual in the classroom, rather than expecting every individual to achieve with the same type of instruction.

Mainstreaming and Inclusion in the Music Classroom

Few studies address the number of students with exceptionalities participating in school music activities. Findings from the late 1970s suggest that approximately 3.5% of students participating in school music activities were students with exceptionalities (Shehan, 1977). Studies completed in the mid-to-late 1980s indicated that the rate at which individuals with exceptionalities were mainstreamed into music classes had increased, with researchers estimating an average of 5% (Atterbury 1986; Atterbury 1987). Later, Atterbury (1993) estimated between 5-10% of students enrolled in school music activities were students with exceptionalities. Unfortunately, these data are dated, and more research is necessary to ascertain the number of students with exceptionalities participating in school music activities today. In addition, the aforementioned studies examine the condition of mainstreaming at the state level; and therefore lack generalizability across states. Fortunately, the increase in the number of students with exceptionalities who participated in school music instruction paralleled the increase in the number of students with exceptionalities who participated in school music instruction paralleled. If this remains true,

one may posit that approximately 13% of students participating in school music activities today are children with exceptionalities.

Although there is a lack of recent research addressing the number of students with exceptionalities enrolled in school music activities, several studies have examined the number of music educators who interact with these students. In a national survey examining music educator involvement with students with exceptionalities, Gilbert and Asmus 1981) found that "62.9% of the music educators surveyed reported some professional involvement with disabled students" (p. 33). Seventeen years later, in an investigation of mainstreaming practices in Maine, Atterbury (1998) found that approximately 81% of music educators interacted with students with exceptionalities in the music classroom (p. 30). In their investigation of music educators' interactions with and preparation to teach students with exceptionalities, VanWeelden and Whipple (2013) found that approximately 99% of music educators interact with students with exceptionalities in a given academic year.

The instructional implications of these data are profound. If the majority of students with exceptionalities are participating in school music activities, and nearly all music educators are working with students with exceptionalities, it is essential that educators be able to meet the educational needs of these children. In order to accomplish this goal, IDEA mandates that educators be prepared to work with students with exceptionalities, connected to a coordinated educational support system, and have access to the resources necessary for providing an appropriate education to each student (Individuals with Disabilities Education Act, 2004). Unfortunately, researchers have found that music educators feel ill-equipped to meet the needs of these students.

Preparation and Practice

Although almost all music educators interact with students with exceptionalities in a professional capacity, over 90% report feeling incapable of adequately adapting music education goals and objectives for students with exceptionalities (McCord & Watts, 2010, p. 82). In addition, research indicates that "music teachers who are the most affected by mainstreaming policy feel they have inadequate knowledge of exceptional children and how to teach them in integrated groups" (Atterbury, 1987, p. 21). Some researchers suggest that this may be due to a lack of preservice training concerning the teaching of students with exceptionalities (Frisque, Niebury, & Humphreys, 1994; Gfeller, Darrow, & Hedden, 1990; VanWeelden & Whipple, 2013). Other researchers suggest a lack of adequate field experience hours also may be a contributing factor (Hahn, 2010; Hammel, 2001).

In addition to feeling ill-prepared to meet the needs of students, research indicates that few music educators are active participants in IEP development and placement decisions for students with exceptionalities. Early research indicated that between 85% and 98% of music teachers did not participate in the IEP process or placement decisions (Atterbury, 1986; Atterbury, 1987). Later research indicated an increase in participation, with 78% of music educators not participating in the IEP process (Atterbury. 1998). Recent research indicates that nearly three-quarters of music teachers have little or no involvement in the IEP process or placement decisions of students in their classes (VanWeelden & Whipple, 2013). Although the number of music educators participating in the educational planning process for students with exceptionalities has increased since the passing of IDEA in 1975, more involvement is necessary to ensure students with exceptionalities are placed appropriately and receive an appropriate music education.

Competencies for Teaching and Learning

Although a great deal of research exists examining preservice music teacher preparation and perceptions of its efficacy as it pertains to educating students with exceptionalities, few researchers have examined the competencies necessary for teaching these students. In fact, since the passing of IDEA nearly fifty years ago, only two studies have addressed the competencies necessary to educate students with exceptionalities effectively.

Ansuini (1979) was the first to examine essential teacher competencies for teaching students with exceptionalities. The primary objective of his study was to identify what teacher competencies were needed by elementary school instrumental teachers in planning learning experiences for children with exceptionalities. His secondary objective addressed how well teacher-training programs were preparing future teachers to work with this population of students. Analysis of survey data and coding of interview content revealed the following competencies:

(1) patience, (2) a knowledge of the child and nature of his or her learning disorder, (3) a willingness to accept limited progress, (4) a willingness to form a close, personal relationship with the student, and (5) more time to give these students the special attention they need. (Ansuini, 1979, p. 97).

As a result, Ansuini called for additional research—specifically, multiple replications of his study—to determine the competencies necessary to meet the needs of students with exceptionalities in every music classroom. Unfortunately, additional research in this area was not completed for another two decades.

Hammel (2001) conducted the most comprehensive study on necessary music teacher competencies when working with students with exceptionalities in the elementary music

classroom. Using ethnographic research techniques, she examined competencies used by practicing elementary music teachers, competencies taught by college music education faculty during preservice training programs, and competencies considered essential for undergraduate elementary music education students. The respondents deemed the following competences essential for teaching students with exceptionalities:(1) general knowledge of the nature of exceptionalities; (2) the legal aspects of teaching individuals with exceptionalities; (3) the ability to modify and adapt instruction and instructional materials to suit all individuals within the classroom; (4) the ability to assess students and instruction, knowledge of classroom management and structure; and (5) knowledge of how to communicate with special education personnel.

Based on these competencies, the researcher designed a hypothetical curriculum for an undergraduate course addressing educating students with exceptionalities in the music classroom. In it, she introduced each competency and reinforced it through lectures, class discussions, assigned readings, related assignments, and field experiences. Unfortunately, the study includes only an overview of the curricula content, and the researcher does not state whether she actually taught the course. Therefore, additional research regarding curricular content for teaching students to meet the aforementioned competencies is necessary to prepare future music educators better to work with students with exceptionalities in a professional capacity.

Purpose and Problems

Although more researchers are examining music education and students with exceptionalities, there remains a paucity of research related to the preparation of future music educators to teach this population. Past research examined the competencies necessary for teaching students with exceptionalities; however researchers have yet to examine how teacher education institutions are preparing music educators to achieve those competencies. Therefore, with the hope of developing music educators prepared to address the educational needs of students with exceptionalities, this study will examine the effect of teaching practices in higher education regarding teaching students with exceptionalities on the perceptions of students in those programs on their preparation to work with students with exceptionalities. Specific research questions include:

- 1. How do institutions of higher education prepare future music educators to work with students with exceptionalities?
- 2. To what degree do students feel they grasp and can implement the essential competencies for teaching students with exceptionalities outlined by Hammel (2001b)?
- 3. What is the relationship between methods of instruction and students' perceptions on preparation to work with students with exceptionalities?

CHAPTER 2

REVIEW OF LITERATURE

This study will focus on preservice music educators' perceptions of their abilities to teach students with exceptionalities based on competencies outlined in the related research discussed in this chapter. The chapter addresses a variety of topics pertaining to music teacher education and students with exceptionalities, including: (1) attitudes of in-service teachers toward including students with exceptionalities in traditional music classrooms and ensembles; (2) perceptions of in-service teachers on their abilities and preparation to teach students with exceptionalities; and (3) preservice preparation, including degree program requirements, course content, course structure, and preservice teacher perspectives on training experiences. This chapter also includes studies examining necessary teacher competencies for teaching students with exceptionalities.

Essential Teacher Competencies

Although research exists examining preservice music teacher preparation and perceptions of the efficacy of preservice music teacher preparation as it pertains to students with exceptionalities, few researchers have examined the competencies necessary for teaching students with exceptionalities. In fact, since the passing of P.L. 94-142 fifty years ago, only two studies addressed the competencies necessary to educate students with exceptionalities effectively.

Ansuini (1979) was the first to examine essential teacher competencies for teaching students with exceptionalities. The primary objective of his study was to identify what teacher competencies were needed by elementary school instrumental teachers in planning learning experiences for children with exceptionalities. His secondary objective addressed how well teacher-training programs were preparing future teachers to work with this population of

students. He collected data from a random sample of elementary instrumental music teachers in Western New York using a two-part, researcher-generated questionnaire and follow-up interviews.

As is consistent with the related research from this time period, data indicated that only 40% of the elementary instrumental music teachers had experience working with students with exceptionalities. In addition, nearly 70% of the teachers surveyed felt inadequately prepared to educate students with exceptionalities effectively, and this lack of preparation was evident in the degree to which these teachers prepared curricula for students with exceptionalities in instrumental music programs. These data suggested that more specialized preservice and inservice training was necessary in order to equip elementary instrumental music teachers adequately to teach these students. To plan learning experiences effectively for preservice and inservice training, the respondents suggested a number of personality-driven characteristics for teaching students with exceptionalities effectively. These characteristics included, but were not limited to, patience, knowing and understanding the needs and capabilities of each student, and a willingness to form close relationships with each student (Ansuini, 1979, p. 97).

Although a limited number of teachers reported having experience teaching students with exceptionalities, a majority of the respondents had a negative attitude toward teaching students with exceptionalities. The researcher posited that negative attitudes were a result of inadequate preparation, as well as misunderstandings or misconceptions the respondents had about students with exceptionalities, which may make competencies developed by Ansuini suspect. As a result, Ansuini called for additional research to determine the competencies necessary to meet the needs of students with exceptionalities in every music classroom.

In 2001, Hammel conducted the most comprehensive examination of the competencies needed for teaching students with exceptionalities in the elementary music classroom. Specifically, she examined competencies used by practicing elementary music teachers, competencies taught by college music education faculty during preservice training programs, and competencies considered essential for undergraduate elementary music education students. She collected data using the following ethnographic techniques: (a) surveys of elementary music teachers, as well as college and university faculty who teach undergraduate elementary music courses; (b) interviews with practicing elementary music teachers; (c) observations of children with exceptionalities in elementary music classrooms; and (d) analysis of syllabi from college and university faculty members who teach undergraduate courses that focus on the inclusion of students with exceptionalities in music. Survey participants included 202 elementary music educators from Virginia, as well as 30 college and university faculty members from Florida, Georgia, South Carolina, North Carolina, Virginia, and Maryland. Three elementary music educators from the survey sample deemed exceptional by their music supervisors participated in individual interviews and classroom observations. In addition, the researcher selected fifteen syllabi from college and university faculty members to identify teacher competencies taught through classroom and field experiences.

For the purpose of this study, data from each research tool were coded and analyzed independently. The researcher included a specific competency if 66% or more of the respondents considered it essential in two or more measures. Coding of data qualitative and quantitative data yielded the following fourteen competencies:

1. acquaintance with various handicapping conditions (general knowledge)

2. knowledge of "Individuals with Disabilities Education Act (IDEA)" (legal aspects)

- 3. knowledge of music teacher's role on evaluation team (assessment and evaluation)
- 4. ability to develop and use informal assessment procedures (assessment and evaluation)
- 5. ability to monitor the learning process of all students (assessment and evaluation)
- 6. ability to evaluate program effectiveness for specific learners (assessment and evaluation)
- 7. ability to identify areas of particular difficulty for a student (assessment and evaluation)
- 8. ability to modify, if necessary, the instruction program to accommodate special learners (curriculum planning)
- 9. knowledge of how to modify the physical environment of a classroom for special learners (classroom structure)
- 10. ability to encourage appropriate social interactions among all students (classroom management)
- 11. knowledge of effective classroom management techniques (classroom management)
- 12. knowledge of appropriate materials for diverse learning abilities and styles (methods and materials)
- 13. ability to adapt material to provide for individual differences (methods and materials)
- 14. ability to communicate effectively with support personnel (communication skills)

(Hammel, 2001a, p. 11)

Using these competencies, the researcher created a hypothetical course for undergraduate students that would address educating students with exceptionalities in the elementary music classroom. Additional research examining this and other curricular programs pertaining to educating students with exceptionalities in music classrooms is necessary to prepare music educators better to teach students with exceptionalities.

Perceptions of In-Service Teachers on Inclusion

A number of researchers have examined the perceptions of in-service teachers concerning the inclusion of students with exceptionalities in school music activities. A great deal of this literature falls into one of two categories: attitudes toward inclusion or perceptions on the practice of inclusion.

Attitudes toward Inclusion

One of the first researchers to examine teacher attitudes toward inclusion was White (1981). In her study, she examined the attitudes of selected public school music teachers from three North Carolina school systems toward students with exceptionalities, as well as their willingness to include students with exceptionalities in their classrooms. Specifically, White studied the effect of demographic factors on teacher attitude toward students with exceptionalities, the effect of teaching experience and experience with students with exceptionalities on development of teacher attitude, and the difference in attitude toward the inclusion of students with exceptionalities across specialty areas (general, choral, and instrumental music). She collected data using two researcher-designed questionnaires.

Responses indicated positive attitudes toward students with exceptionalities, as well as a willingness to include students with exceptionalities in regular classroom environments. Unfortunately, responses also suggested a resistance to include students with specific exceptionalities. Although 86% of respondents favored include students with physical disabilities in the regular classroom, only half favored including students with mental disabilities (White, 1981, p. 40). In addition, findings suggested that elementary general music teachers were most

willing to include students with exceptionalities in their classrooms, while high school choral directors were least willing. The researcher commented on these findings, postulating that the lack or nature of a respondent's experience with mainstreamed students may be the greatest factor in determining a teacher's attitude toward students with exceptionalities.

To ascertain the way in which experiences with mainstreamed students impact teachers' attitudes toward students with exceptionalities, Darrow (1999) examined music educators' perceptions regarding the practice of full inclusion. Unlike earlier studies, she collected data through personal interviewing. Participants included all music educators in a large Midwestern school district: 17 general music teachers, 13 instrumental music teachers, and five vocal music teachers. Experience of the participants ranged from two years to 31 years in the classroom.

The researchers found 13 critical issues related to the inclusion of students with exceptionalities in music classrooms and ensembles, including: physical accessibility of the educational environment; adaptation of curriculum materials and instruments; collaboration and consultation with all parties involved in educating students with exceptionalities; parent expectations regarding inclusion; experiences and educational preparation to teach students with exceptionalities; information about specific exceptionalities, students, and IEP goals; performance expectations; lesson planning for included students; placement of students with exceptionalities; socialization; time management; and varied abilities (Darrow, 1999, p. 261). More than half of the participants indicated that collaboration with special education faculty, more information about included students, additional time requirements for instruction, and classroom management for varied abilities were critical issues in their classrooms.

With regards to how the inclusion of students with exceptionalities had affected teaching methodology, respondents articulated seven main ways through which they adapted instruction:

modification of curriculum material, individualized instruction, use of multiple teaching strategies and approaches, use of paraprofessionals, use of peer partners, smaller class sizes, and adjustments to pacing. Although several respondents reported the presence of paraprofessionals in their classrooms, some believed that they were "more an interference than a help" (p. 263). Over 40% of the participants indicated that they individualized instruction, and a majority indicated that they altered the pacing of course material to increase student learning.

Overall, most participants believed that inclusion had benefited both students with and without exceptionalities. Respondents reported that students without disabilities were more understanding and accepting of others, and, as a result, students with exceptionalities became a part of peer groups and grew more skilled socially. Unfortunately, a large number of participants felt that students with exceptionalities "were 'left behind' musically" and that students without exceptionalities occasionally resented the amount of time spent "catching up" those students who were falling behind (Darrow, 1999, p. 265). Regardless of challenges, nearly twice as many positive statements as negative statements were made regarding inclusion of students with exceptionalities, and negative statements primarily referred to specific situations rather than inclusion as a whole.

Perceptions on Practice

Shehan (1977) was the first to address the status of inclusion in school music activities. She examined the educational and musical provisions for students with exceptionalities and the training music educators received to work with students with exceptionalities in the Ohio public schools. She collected data from a random sample of music supervisors using a brief questionnaire, which gathered the following: "1) general school district information, 2) educational provisions for exceptional children, 3) music for exceptional children, and 4) future

plans for music education" (p. 48). Findings indicate that, of the school districts queried, only 79% practiced mainstreaming, and, even then, only 6% mainstreamed students with exceptionalities for every subject. In addition, the majority of students who were mainstreamed for part of the school day participated only in art, music, physical education, and home economics classes with general education students. Although most respondents felt satisfied with the current mainstreaming practices in their districts, they also felt unprepared to teach students with exceptionalities.

Gilbert and Asmus (1981), in their frequently cited study, investigated the involvement of music educators with students with exceptionalities, their knowledge of P.L. 94-142 regarding these students, and their needs or concerns in developing and implementing instruction for these students. The researchers collected data using their own needs assessment survey. Participants included a national sample of elementary and secondary music educators representing all geographical areas of the United States. Unfortunately, the researchers failed to identify the method used to select the participants; therefore it is impossible to determine if this was a representative sample.

Responses indicated that 62.9% of the respondents had some professional contact with students with exceptionalities; however, less than one third of the respondents had participated in IEP development. In addition, two thirds of the music educators surveyed reported having some knowledge of P.L. 94-142. Regarding the status of music education practice in mainstreamed classrooms, responses indicated a need for additional information on the impact of federal legislation on mainstreaming, as well as specific information on instructional techniques, curriculum design, and assessment strategies for this population. In addition, several respondents indicated a need for more information on motor and perceptual-motor skills development,

particularly at the elementary level. Based on these findings, the researchers suggested that preservice and in-service training should focus on broad-based instructional skills specifically related to IEP development, curriculum design, and assessment.

Five years later, Atterbury (1986) assessed the status of mainstreaming practices as perceived by a sample of 133 elementary music teachers in the Southern Division of MENC. Specifically, she examined teachers' perceptions of administrative support, instructional adaptations, and impact of mainstreaming on students. She collected data using a researcherdesigned survey form that mirrored that of Gilbert and Asmus (1981).

Responses suggested that most teachers felt that they received inadequate support from administrators. Specifically, 76% of respondents indicated a lack of administrative support, and 87% of respondents indicated a lack of assistance from teacher aids or other academic support staff (p. 204). In addition, the majority of respondents indicated low (43%) to moderate (51%) involvement in adapting music instruction, textbook contents, and supplementary materials to meet the individual differences of mainstreamed children. In fact, only 16% of participants reported being moderately or actively engaged in IEP development. Although data suggested lack of adequate support to teach students with exceptionalities, 95% of respondents believed that mainstreamed students were moderately or fully engaged in all music activities. However, findings also suggested that the participants may not have had the tools necessary to adequately evaluate the musical growth of students with exceptionalities.

In what is considered to be the seminal study on the perceived effectiveness of mainstreaming in music classes, Gfeller, Darrow, and Hedden (1990) examined the way in which teaching experience and specialty area (general, choral, or instrumental music) influenced perceived success of mainstreaming in Iowa and Kansas schools. They collected data using a

researcher-designed questionnaire administered to 5% of the elementary and secondary music educators in both Iowa and Kansas. Unfortunately, the small number of responses, coupled with the disproportionate number of elementary music teacher responses, thwarted the researchers' attempt to obtain a representative sample.

Responses indicated that instrumental music teachers received significantly more instructional support for working with students with exceptionalities than choral and general music teachers; however, even with instructional support, there was a general lack of consensus across all specialty areas concerning the perceived success of mainstreaming. Although 62% of the respondents reported that students with exceptionalities were included effectively in class instruction, over half the participants indicated that the needs of students with exceptionalities might be met better in a self-contained classroom⁴ (p. 96). Data also revealed minimal participation of music teachers in placement procedures, lack of in-service education experiences for music teachers, and lack of adequate preparation time for individualizing programs for students with exceptionalities. Responses also indicated that "students with emotional or behavioral disorders and hearing impairments are the most difficult to mainstream, while students with speech/communication and other health impairments are the least difficult to mainstream" (Gfeller, Darrow, & Hedden, 1990, p. 95).

Four years later, Frisque, Neibur, and Humphreys (1994) examined the nature and extent of mainstreaming in Arizona's music classrooms. They collected data using a researcherdesigned questionnaire that incorporated ideas from related research. The researchers modified the questionnaire to permit direct comparison of data between portions of their study and that of

⁴ For the purpose of this research, the term *self-contained classroom* refers to an educational environment comprised solely of students with exceptionalities.

Gfeller, Darrow, and Hedden (1990). They collected data from a random sample of Arizona K-12 music educators (n = 107).

Results indicated that 94% of the respondents had experience working with students with exceptionalities in the classroom setting. Of the remaining 6%, most were secondary instrumental music teachers or teachers with fewer than five years of teaching experience. In addition, 75% of respondents reported that mainstreaming is the only music option for students with exceptionalities at their schools, and that even most self-contained classes were taught music by the regular music teacher. Respondents also indicated a low involvement in the placement process, with 72% 'rarely' or 'never' participating in placement decisions. In addition, over 90% of the respondents believed that they had little influence in making placement decisions (p. 99). Although a majority of the respondents reported feeling successful in their teaching of special learners, only 33% felt that they effectively integrated students with exceptionalities into their classes. Additional results confirmed previous research findings that students with specific disabilities impact teachers' attitudes toward mainstreaming. Results indicated that:

emotionally/behaviorally disordered students are perceived as significantly more difficult to mainstream than multiply disabled, trainable or educable mentally handicapped, learning disabled, visually handicapped, hearing-impaired, or speech-impaired students. (Frisque, Niebur, & Humphreys, 1994, p. 102)

Like those of White (1981) and Gfeller, Darrow, and Hedden (1990), results indicated that students with physical challenges, as well as students with speech impairments, were considered "significantly easier to mainstream" than students with other exceptionalities.

Four years after Frisque, Niebur, & Humphreys' examination of mainstreaming practices in Arizona, Atterbury (1998) examined mainstreaming practices in Maine. The purpose of her study was to compare and contrast the mainstreaming practices of Maine, a state that required special education coursework for teacher certification, to those of Iowa/Kansas (Gfeller, Darrow, & Hedden, 1990) and Arizona (Frisque, Niebur, & Humphreys, 1994), states that did not require coursework for certification. Participants included 117 randomly selected Maine music educators.

Of the participants, 53% indicated that all children with exceptionalities are mainstreamed into music classes, while 28% indicated some are mainstreamed (p. 30). Although a majority of students with exceptionalities were mainstreamed into music classes, 78% of the respondents "rarely" or "never" participated in the placement process, and 39% of the respondents reported participating in the development of the IEP. In addition, the majority of respondents indicated that socialization was the primary reason for mainstreaming placements in music, which may explain why only 45% of the respondents believed that special learners were integrated effectively into music class.

Comparisons to Iowa/Kansas (Gfeller, Darrow, & Hedden, 1990) and Arizona (Frisque, Niebur, & Humphreys, 1994) suggested that teacher preparation practices greatly affect mainstreaming practices. Responses indicated that 39% of music educators in Maine participated in the IEP process, as compared to only 13% in Iowa/Kansas. In addition, 58% of Maine music educators reported having adequate assistants from aides, in contrast to a meager 27% of Iowa/Kansas music educators. Comparisons between Arizona and Maine suggested that Maine teachers had more contact with students with learning disabilities (93%) and students with emotional disturbance (75%) than did teachers in Arizona. Across all three studies, the

respondents reported a lack of adequate resources for modifying instruction, as well as a significant lack of participation in IEP development and the placement process. Although Maine teachers appeared to be, on the whole, more involved in the education of students with exceptionalities, there was still a lack of involvement in the IEP development and placement processes (7% of Maine teachers "always" or "sometimes" took place in this part of the education process)(p. 31). Unfortunately, McCord and Watts (2010) reinforced these findings.

McCord and Watts (2010) examined music educators' perceptions of their involvement in the IEP process, their knowledge of music-specific assistive technology devices, and their perceptions of the importance of assistive technology for students with exceptionalities. They collected data from a national sample of 201 music educators using a researcher-generated survey that focused on music education and IEP involvement, knowledge and perception of the importance of a range of assistive technologies, as well as demographic information.

A substantial number of respondents (85.6%) indicated that their role as music educators included adapting music goals and objectives for students with exceptionalities; however only 9% of the respondents indicated their skills in this area as being "competent" (p. 82). Although involvement in adapting music goals and objectives was expected, over 60% of the respondents indicated that they did not participate in the IEP process. Of those teachers who participated in the IEP process (36.8%), 87.9% indicated that they had little or no experience writing an IEP, and 83.8% indicated that they had little or no involvement in planning an IEP (p. 83). Most respondents identified a lack of knowledge or scheduling conflicts as the reason for their lack of experience and involvement.

In addition, data indicated that many experienced music educators lacked adequate knowledge of the use of assistive technology in the music classroom. A majority of music

educators (69.2%) indicated having little to no knowledge of assistive technology for vision and reading. In addition, more than half the respondents (60.2%) indicated little knowledge of computer-based devices or musical aids. Slightly more than half of the participants (51.2%) rated themselves as having little to no knowledge of communication aids, and a similar number of respondents (52.7%) rated their knowledge of seating and position aids as inadequate. Although the respondents indicated little knowledge of assistive technology devices, over half the respondents deemed these devices important, suggesting a need for in-service training in this area.

VanWeelden and Whipple (2013) investigated the availability of instructional supports for students with exceptionalities in music classrooms and ensembles. Specifically, the researchers examined: (1) the differences among music educators' perceptions of availability of instructional supports based on specialty area, school size, community setting, student socioeconomic status, and years of teaching experience; (2) the extent to which instructional supports were available and implemented in music classrooms across the United States; and (3) the similarities and differences between the findings of Gfeller, Darrow, and Hedden (1990) and the findings of this study with regards to instructional supports. The researchers collected data using a questionnaire modeled after the survey created by Gfeller, Darrow, and Hedden for the 1990 study. Due to changes in terminology, legislation, and educational philosophies over the two decades since the original study took place, the researchers felt it necessary to construct a new survey tool to better reflect current practices rather than using the research tools developed by earlier researchers.

With regards to the first research question, findings suggested significant discrepancies in the allocation of resources between small schools and large schools, as well as urban schools and

rural/suburban schools. In addition, schools with few or no students receiving free or reduced lunches reported far greater access to instructional supports than all other schools. Findings regarding the extent to which instructional supports were available for music educators indicated that the majority of teachers "had little or no involvement in the IEP process (73%), were occasionally or never consulted about student placement decisions (77%), and placement decisions were never or only occasionally based on the musical ability level of the students with disabilities (73%)" (VanWeelden & Whipple, 2013, p. 39). Teachers also reported a lack of adequate preparation time to plan for and individualize instruction, a lack of adequate resources, such as books and curriculum guides in modifying instruction, and a lack of materials or technology to adapt or modify the classroom, instruments, or other instructional tools to meet the needs of students with exceptionalities.

Music Teacher Preparation

Institutional Perspectives

Schmidt (1989) conducted one of the first studies to address the presence of special education in undergraduate music education coursework. He investigated the inclusion of topics related to students with exceptionalities in undergraduate music education program curricula at 180 teacher-training institutions in the United States. Schmidt collected data using a questionnaire that he designed, which he administered to a random sample of music education department chairs. Findings indicated vast discrepancies in the inclusion of specific material across all topic areas; however "topics such as lesson planning, evaluation, music education philosophy, and classroom management form the core of most music education curricula" (Schmidt, 1989, p. 53). Although not the primary focus of the study, findings suggest that child development and special education coursework were required at a majority of institutions;

however those courses were not taught by music education faculty. In addition, Schmidt states: "the data point to inconsistencies in curricula across institutions, a concomitant lack of agreement regarding priorities in some content areas, and notable gaps between curricular theory and practice" (p. 54). Findings from Heller (1994) suggest that means of addressing the topic of mainstreaming and inclusion in music education may be one of those "inconsistencies."

Heller (1994) narrowed the funnel. She examined how music teacher training institutions prepared music education students to work with mainstreamed learners in elementary and secondary school settings. Specifically, she investigated (1) the training and experiences of music education methods' instructors in their undergraduate degree programs as it pertained to students with exceptionalities; (2) how university music education programs prepared their students to work with mainstreamed students; and (3) any current institutional plans to change music teacher education as it pertained to students with exceptionalities (pp. 9-10). The researcher collected data from a selection of music teacher education faculty at accredited institutions in the Great Lakes Region using a researcher-designed questionnaire.

Results indicated that only 26.9% of undergraduate music teacher education faulty received training to work with students with exceptionalities, and nearly 65% of those faculty members believed their training to be inadequate. In addition, responses indicated that undergraduate teacher educators most frequently included mainstreaming topics in general music methods classes and introductory courses in music education. Conversely, less than 20% of the respondents indicated including mainstreaming topics in instrumental classes or choral music classes. Finally, although 40% of institutions had considered adding a degree requirement pertaining to students with exceptionalities, a majority of institutions, both with and without internal degree requirements, indicated they had no plans to implement additional degree

requirements in the near future. Though Heller completed this investigation over two decades ago, recent research confirms her findings.

Colwell and Thompson's (2000) investigation of the inclusion of mainstreaming information in music education curricula built upon Heller's work. They examined special education courses available to music education majors, determined if these courses were required or elective, and investigated whether these courses were non-specific or content-specific for the music classroom. The researchers collected data using 171 course catalogs from a stratified random sample of Research Category One, public-funded, and privately-funded music teacher education institutions across the country. The researchers also included any school with a music therapy program not previously represented in the sample.

Results indicated that 74% of the schools had at least one course in special education available to music education majors. Of those schools, 86% required at least one course in special education as part of the degree program, and that requirement was most frequently met in non-specific child development or special education course offered through the school, college, or department of teacher education. Of the 30 institutions that offered a content-specific course on special education, enrollment was only required at two. Colwell and Thompson attributed the lack of content-specific special education coursework to multiple factors, including certification requirements in an already credit-heavy degree, difficulties in adding a new course to the curriculum, lack of personnel with expertise and time to teach the course, university degree requirements, and National Association of Schools of Music (NASM) requirements.

Salvador (2010) also examined the inclusion of mainstreaming topics in undergraduate music education coursework. She investigated how music teacher preparation programs addressed the topic of differentiation for exceptional learners. Specifically, she investigated if

institutions required a course, offered a course, or addressed in some other sequenced manner the topic of teaching music to special populations. The researcher collected data from 109 masters and doctoral degree granting institutions using a researcher-generated online survey. Responses indicated that only 29.6% of the 109 institutions surveyed required a music-specific course in teaching special populations. In addition, 23.9% of institutions indicated that they neither required nor offered a course in teaching music to special populations, nor did they integrate this topic into their planned curriculum. Of the respondents who indicated integration of mainstreaming material in methods courses, 40.2% felt that the topic was not addressed in a sequential, planned manner throughout the curriculum.

Salvador's emergent themes parallel the findings of Heller (1994) and Colwell and Thompson (2000). She states:

(a) Required coursework in special education is taught by the department/school/college of education, (b) this topic is difficult to integrate into the already credit-heavy load of music education students, (c) our faculty lack the expertise to teach a course in this topic or to integrate this topic across our curriculum, and (d) our faculty believe that this topic should be intentionally integrated through music education coursework. (Salvador, 2010, p. 31)

Findings from the aforementioned studies indicate a lack of music-specific coursework addressing the needs of students with exceptionalities. Additionally, findings suggest a need for additional research to determine the extent to which music education students receive information on mainstreaming. Are music education students with access to content-specific electives in special education enrolling in these courses, and, if not, why not? Do music education students believe that non-specific child development and special education coursework
adequately prepare them to teach students with exceptionalities? To what degree are music education students interacting with mainstreaming content in general, vocal, string, and band methods courses, and are these students provided the opportunity to observe and teach students with exceptionalities in these courses? Finally, the findings suggest a lack of inclusion of mainstreaming material in methods courses may be a result of the course instructor's lack of preparation and experience related to students with exceptionalities. If this is the case, in what ways are institutions of higher education encouraging and supporting faculty and staff to bridge this knowledge gap? It is essential for departments, schools, and colleges of music to begin considering how these findings impact the professional capabilities of their future music educators.

Preservice Teacher Perspectives

One of the first studies to examine preservice music educators' perceptions concerning their preparation to teach students with exceptionalities was that of Kaiser and Johnson (2000). Using a pretest-posttest design, they investigated the perceptions of music majors working with students with hearing impairments. Participants included 23 music education and music performance majors enrolled in a brass ensemble class. The researchers obtained data using a brief questionnaire that investigated the degree to which the students felt prepared, comfortable, and willing to work with students with hearing impairments. The researchers administered the questionnaire prior to and following an hour-long interactive concert that the brass ensemble students gave for elementary students with hearing impairments.

Pretest scores indicated that the majority of participants felt willing and comfortable working with students with hearing impairments. In addition, pretest scores indicated that participants believed music could be used as a tool in educating students with hearing

impairments. However, the pretest scores also showed that the majority of the participants did not feel prepared to work with hearing impairments. When the researchers compared pretest and posttest scores, they found that the mean scores increased across all areas (preparation, comfort, and willingness). In addition, participants indicated that the performance experience helped them to understand the importance of music in special education. Kaiser and Johnson suggested that field experience may impact preservice music teachers' perspectives on working with children with exceptionalities. In addition, they suggested that interactive experiences with students with exceptionalities may help ease preservice music teachers' apprehension in working with this population.

Five years after the publication of Kaiser and Johnson's (2000) study, VanWeelden and Whipple (2005) examined the function of field-based experience in secondary general music methods courses. They investigated music education students' (a) personal comfort interacting with individuals with exceptionalities; (b) perceptions of preparation in their education to work with students with exceptionalities; (c) comfort in working with students with exceptionalities; (d) willingness to provide music for students with exceptionalities; and (e) perceptions of behavior and learning of students with exceptionalities (p. 63). Participants included two groups of 14 undergraduate students placed in self-contained special education classrooms. The researchers gathered data using a brief 17-question survey that they administered at the beginning and end of the field experience. The survey tool gathered students' perceptions of teaching music to secondary students with exceptionalities, including how prepared, comfortable, and willing the participants felt to teach students with exceptionalities. The response format was a five-point Likert-type scale ranging from "strongly disagree" to "strongly agree."

Comparison of responses from both surveys indicated that preservice music educators' confidence in teaching students with exceptionalities increased following the field experience. In addition, the researchers found that preservice music educators felt more comfortable and better prepared to teach students with exceptionalities as a result of the field experience. They stated, "Results indicated the field experience had significantly positive effect in regard to students' comfort in inclusive music settings" (p. 67).

VanWeedlen and Whipple (2007) sought to replicate their examination of the function of field-based experience in secondary general music methods courses with one key change. Rather than placing participants in a self-contained classroom containing a single subpopulation of students with exceptionalities, the researchers placed participants in self-contained classrooms containing two subpopulations of students with exceptionalities. In addition to examining the impact of field experiences on preservice music educators' perceptions concerning their preparation, comfort, and willingness to teach students with exceptionalities, the researchers examined the function of the type of field experience (one subpopulation versus two subpopulations) on the aforementioned perceptions. Like their previous study, data indicated that field experiences had a strong, positive effect on preservice music educators' perceptions concerning their preparation, comfort, and willingness to teach students with exceptionalities. In addition, comparisons of the 2005 and 2007 studies indicated no significant differences in perception existed between the groups who participated in field experiences in self-contained classrooms with one subpopulation and self-contained classrooms with two subpopulations.

Findings from the aforementioned studies suggest that preservice music educators who have purposeful interactions with students with exceptionalities feel more prepared to, comfortable with, and willing to teach this population. Unfortunately, these studies all examine

undergraduate students interacting with students with exceptionalities in self-contained classrooms. In order to fully ascertain the degree to which preservice music educators would feel comfortable teaching students with exceptionalities in integrated or mainstreamed settings, more research is needed. Specifically, researchers must examine preservice music educators' feelings of preparedness, comfort, and willingness to teach students with exceptionalities in integrated, rather than self-contained, classroom settings.

In-Service Teacher Perspectives

Wilson and McCrary (1996) examined the effect of instruction on in-service music teachers' attitudes toward teaching students with exceptionalities. Participants included 18 music educators enrolled in a seven-week summer graduate course on inclusive teaching in the music classroom. The participants completed a brief survey at the beginning and end of the course. The survey included statements describing students from five different exceptionality subcategories (physical, multiple, mental, emotional, and none). The researchers requested that the participants respond to the following descriptions: (a) "I would feel comfortable in interacting with this individual"; (b) "I would be willing to work with this individual"; and (c) "I would feel capable in working professionally with this individual." The participants responded using a five-point Likert-type scale in which 1 meant "strongly disagree" and 5 meant "strongly agree."

The results of this study were mixed. Exposure to descriptions of children with exceptionalities seemed to decrease participants' willingness and comfort in teaching students in this population. Conversely, the participants indicated that they felt more capable teaching students with exceptionalities at the end of the course. Wilson and McCrary posit that the decrease in willingness and comfort in teaching students with exceptionalities may stem from a reported lack of involvement in the planning for and placement of these students in the music

classroom. The researchers also suggest that a lack of field experience as part of the course may have contributed to this finding. Overall, the researchers conclude that coursework and practical experience may positively impact music educators' attitudes toward teaching students with exceptionalities (p. 31).

Smith and Wilson (1999) also examined the effects of classroom instruction and field experience on the attitudes of in-service music educators toward students with exceptionalities. Participants included in-service general, choral, and instrumental music educators from elementary, middle, and high school teaching environments. The researchers collected data using the survey tool developed by Wilson and McCrary (1996). They administered the survey at the beginning and end of the academic term. Findings indicated that music-specific coursework and field experiences with students with exceptionalities increase teacher willingness, comfort, and perceived capability to educate students in this population. However, the only category in which the gains were statistically significant was in teachers' perceived capability.

In order to gain more information about in-service teacher attitudes toward the structured field-experience practicum, Smith and Wilson administered the Music Education in Mainstreaming Needs Questionnaire (Heine, 1996) as well. This survey investigated participants' perceived need for more information across five categories: P.L. 94-142, specific disabilities, instruction, assessment, and classroom management. They collected data using a four-point Likert scale. Like the survey instrument developed by Wilson and McCrary, this survey was administered at the beginning and end of the academic term. Results indicate a statistically significant decrease in participants' need for more information across all categories, suggesting that class instruction and field-experiences adequately met the participants' needs.

Furthering the research on music teachers' perceptions of their abilities to teach students with exceptionalities, Hammel and Gerrity (2012) assessed the effect of instruction on music teachers' perceptions of competence when including these students in their classrooms. The researchers collected data using a questionnaire containing 14 Likert-type scale items that reflected the specific skills and knowledge needed to include students with exceptionalities effectively in music classrooms as established in Hammel (2001b). They administered the survey at the beginning and end of an online graduate course on music for students with exceptionalities. The course included direct instruction, web links, video case studies, online discussion forums, quizzes and tests, viewing of authentic documents (i.e.; IEPs), an educational community interview, and an observation of another teacher (p. 8).

Pretest scores indicated that most participants already perceived themselves as competent when dealing with students with exceptionalities; however, posttest competency scores indicated that most participants perceived themselves as more competent following instruction. The researchers observed significant increases in teachers' perceptions of their awareness of students' needs, the awareness of their role on the evaluation teams at their school, and their ability to identify difficulties for students with exceptionalities in their classroom. In addition, the researchers observed slight increases in the teachers' perceptions of their ability to modify the physical environment of their classrooms to accommodate students with exceptionalities and effectively use classroom management techniques. Only one category, ability to communicate effectively with special education personnel, showed a decrease from the pretest to the posttest. The researchers hypothesize that this was a result of the participants' lack of awareness regarding communication at the beginning of the course, causing an inflation of the average response scores. The researchers state, "By highlighting the positive effects of communication with

special education personnel and the extensive role the music educator may play in this process, instruction seems to have led participants to record a more realistic view of their competence in this area" (Hammel & Gerrity, 2012, p. 11).

Like Smith and Wilson (1999), Davila (2013) examined the attitudes of music educators enrolled in a music-specific special education course toward teaching students with exceptionalities. Specific research questions addressed: (1) participants' goals for taking the course; (2) strategies used to instruct students with exceptionalities; (3) application of knowledge gained through the course; (4) changes in attitude toward collaboration, the IEP process, modifying instruction, and classroom behavior management; and (5) changes in attitudes toward teaching students with exceptionalities. Participants included four elementary general music educators enrolled in a graduate course that focused on inclusive teaching. As this was a mixedmethods study, data included researcher field notes and journal entries, e-mail correspondences between the researcher and her participants, participants' school district report cards and survey data, participants' course assignments, and participants' interview transcripts. Qualitative data collection and analysis occurred concurrently, while quantitative data were collected at the beginning and end of the academic term.

Data collected from the survey tool indicated a strong, positive correlation between instruction and teachers' feelings pertaining to teaching students with exceptionalities. Emergent themes indicated that all four participants found their preservice preparation to teach students with exceptionalities to be inadequate; however none of the participants indicated that this was an impetus to enroll in additional coursework. Rather, goals for the course varied as a function of experience. The two participants with the least amount of experience sought more knowledge on how to adequately meet the musical, social, and educational needs of all the students with

exceptionalities within their classroom, while the more experienced teachers sought to improve upon already effective teaching routines. Qualitative data also suggested that the teachers have a willingness to experiment with different classroom behavior management and instructional strategies to best meet the needs of their students. All participants implemented at least two different classroom behavior management and instructional strategies discussed in their course, and, 12 weeks after the course, all four participants continued to implement new strategies to improve upon their instruction. Overall, the data suggested that the participants found that the additional instruction specifically addressing strategies for inclusive teaching to be helpful in improving their teaching practices.

Perceptions on Preparation

In addition to examining in-service teachers' perceptions on the practice of inclusion, Gfeller, Darrow, and Hedden (1990) examined in-service music educators' perceptions of their training to teach students with exceptionalities. Using a survey tool designed to capture the participants' perceptions of the practice of inclusion, the researchers gathered respondents' perceptions of their preservice preparation for teaching this population. Data indicated that music educators in Iowa and Kansas received little preservice preparation to work with students with exceptionalities. These data were corroborated by Frisque, Niebur, and Humphreys (1994), who found that "more than 40% of the respondents reported that they have received no training in special education, while the training of another 20% was limited to in-service and other types of workshops" (Frisque, Niebur, & Humphreys, 1994, p. 98).

In her examination of music teachers' perceptions on their preparation for mainstreaming, Hammel (2001a) studied the preservice coursework and field experiences of practicing elementary music teachers to identify the ways in which college and university music education

faculty addressed meeting the needs of exceptional learners in the elementary music classroom. She hypothesized that music teachers were being prepared to teach students with exceptionalities; however music methods courses might not be representing the competencies needed to teach those learners effectively. She also hypothesized that field experience opportunities may not be appropriately structured to provide opportunities to acquire these teacher competencies. Participants included 202 Virginia music educators with varying degrees of teaching experience. Hammel collected data using a researcher-designed survey that focused on coursework and the experiences that the teachers had received that focused on students with exceptionalities as part of their undergraduate degree program.

Responses indicated that, during preservice coursework, students with "educable mental retardation" and learning disabilities were discussed most frequently; however few respondents had the opportunity to observe these students, and even fewer had the opportunity to teach them. Most respondents reported observing or working with students with other health impairments, specific learning disabilities, and emotional impairments. In addition, the respondents reported extremely limited field experience hours with students with exceptionalities. Specifically, 76% of the respondents observed students with exceptionalities for fewer than five hours during preservice field experiences.

Emergent themes from the free-response answers suggested that teachers felt ill-prepared to manage the behavior of students with exceptionalities; ill-equipped to modify instruction for all students in their classes; and generally unsupported by special education staff. Many respondents indicated that extensive preservice field experience might help diffuse these issues. Fortunately, further analysis of data indicated that teachers with less experience discussed

students with exceptionalities more during their preservice coursework than their more experienced colleagues, suggesting that preservice curricula are beginning to reflect the increase in mainstreamed students in elementary music classrooms and to prepare their preservice teachers to work with students who have exceptionalities. However, more work is needed to prepare music educators adequately to teach students with exceptionalities.

Hahn (2010) examined the professional preparation and practices of 363 Pennsylvania music educators to include students with exceptionalities in music classes. To ascertain the inclusionary practices of music educators, she investigated music educators' understating of and participation in the development and implementation of the IEP, as well as their participation in placing students with exceptionalities in classes that meet their individual needs. In addition, she examined their knowledge of available resources for working with students with exceptionalities, as well as the degree to which the music educators utilized instructional accommodations and adaptations in their classrooms. She collected data using a researcher-designed survey tool containing free-response and forced-choice questions. Forced-choice questions included both fixed-choice (i.e.; *Yes, No,* or *Unsure*) and Likert-type formats.

Few respondents indicated having preservice training opportunities related to teaching students with exceptionalities. Specifically, only 59.2% of respondents indicated that they had taken at least one undergraduate course that included information regarding students with exceptionalities. Of those respondents, 64.2% reported that the course provided minimal training regarding specific instructional techniques. Less than half (44.7%) of the respondents who participated in classroom instruction related to students with exceptionalities had access to hands-on field experience while enrolled in the course. In addition, 93.1% of music educators surveyed indicated that they were teaching students with exceptionalities in their classrooms:

however, half of them reported having only limited knowledge of their legal responsibilities under IDEA, of what constitutes a least restrictive environment, of how to adequately individualize instruction for students with exceptionalities, of how to collaborate with special education faculty, and of the function of an IEP. These data suggest a need for more extensive preservice and in-service training experience to ensure that music educators are adequately informed and prepared to teach students with exceptionalities.

In addition to addressing instructional supports for music educators working with students with exceptionalities, VanWeelden and Whipple (2013) investigated music educators' perceptions of their educational preparation to teach this population as well. Loosely modeled after that of Gfeller, Darrow, and Hedden (1990), this national survey examined: (1) the difference in music educators' perceptions of educational preparation based on specialty area (general, choral, or instrumental music), student socioeconomic status, school size, community setting, and years of teaching experience; (2) the extent of educational preparation for working with students with exceptionalities in music among the music educators within the United States; (3) the similarities and differences between these findings and those of Gfeller, Darrow, and Hedden (1990) with regards to perceptions on educational preparation.

Regarding the first research question, data indicated no significant differences for any demographic category. Responses related to the second research question suggested that, although the vast majority of respondents indicated taking a class in child psychology or child development during their preservice training, less than one-fourth reported completing coursework in music in special education, adaptive music education, or music for special populations. Of those fortunate enough to participate in music-specific special education coursework, "results indicated that less than half practiced in field-based teaching experiences

(39%) or participated in evaluation and assessment procedures (30%) for this population" (VanWeedlen & Whipple, 2013, p. 38). Although data suggest that in-service teachers feel inadequately prepared to teach students with exceptionalities, a comparison of these findings to those of Gfeller, Darrow, and Hedden (1990) indicated a significant increase in in-service teachers' perceptions of their preservice preparation to teach students with exceptionalities.

Summary

In the fifty years that have passed since the implementation of IDEA, researchers have explored a variety of topics pertaining to music teacher education and students with exceptionalities. The literature indicates that many music educators have positive attitudes toward teaching students with mild impairments; however, they are hesitant to include students with severe cognitive or emotional impairments (Darrow, 1999; White, 1981). In addition, research suggests that a vast majority of in-service music educators feel unprepared to meet the needs of these students in their classrooms (Frisque, Niebur, & Humphreys, 1994; Gfeller, Darrow, & Hedden, 1990; Hahn, 2010; Hammel 2001a; VanWeelden & Whipple, 2013). Examinations of music education curricula indicate vast discrepancies between institutions in the ways that preservice music educators are trained to work with students with exceptionalities (Colwell & Thompson, 2000; Heller, 1994; Salvador, 2010; Schmidt, 1989), and, although research indicates that preservice teachers who participate in well-structured field-experiences with students with exceptionalities feel more prepared, comfortable, and willing to teach students with exceptionalities (Kaiser & Johnson, 2000; VanWeelden & Whipple, 2005; VanWeelden & Whipple, 2007), no current research has investigated the degree to which field experiences with students with exceptionalities are included in undergraduate music education curricula.

Therefore, the purpose of this study is to examine the effect of teaching practices in

higher education on the perceptions of students in those programs of their preparation to work with students with exceptionalities. Specifically, I will examine (1) how institutions of higher education to prepare future music educators to work with students with exceptionalities; (2) the degree to which students feel they grasp and can implement the essential competencies for teaching students with exceptionalities outlined by Hammel (2001b); and (3) the relationship between methods of instruction and students' perceptions on preparation to work with students with exceptionalities.

CHAPTER 3

METHODOLOGY

Participants

To answer the questions posed in this study, I administered a survey to create a picture of the current state of music teacher preparation concerning students with exceptionalities at Big 10 institutions. The research sample included 155 undergraduate music education students who were enrolled in student teaching at one of ten participating institutions belonging to the Big Ten Conference during the spring semester of the 2014-2015 academic year. I chose to query a sample of music education student teachers because they were immersed in an experience that allowed them to practice and reflect upon the competencies that I examined in this study. I also chose to query this sample because the student teachers were still immersed in the academic environment and might be able to provide a better picture of their preparation experiences than in-service teachers, who may be several years removed from their own undergraduate experiences. The survey was administered electronically using SurveyMonkey.com.

Of the 155 potential participants, 41 completed the survey (a 26.45% response rate). I eliminated eight of the respondents from the data set due to incomplete responses or ineligibility, resulting in a convenience sample of 33 student teachers (a 21.29% response rate). Nulty (2008) suggests a minimum response rate of 30% for surveys and questionnaires completed using electronic platforms; therefore the response rate for the present study was not ideal. Participants varied by teaching area preference; general music (n = 15), choir (n = 9), band (n = 17), strings (n = 4), private studio (n = 13), and other teaching area (n = 2). The student teachers identified their teaching level preferences as well. Junior high (n = 23), intermediate school (n = 21), and high school (n = 21) teaching were most preferred by the participants, while elementary (n = 12),

early childhood (n = 3), and other teaching level (n = 3) were least preferred. For both of these questions, participants were asked to choose all specializations or levels that applied, which is why the number totals more than 33. Of these participants, 14 had personal experiences with individuals with exceptionalities.

Questionnaire

The questionnaire was researcher-designed and informed by the survey tools used in the related research (Atterbury, 1986; Frisque, Neibur, & Humphreys, 1994; Gfeller, Darrow, & Hedden, 1990; Hahn, 2010; Hammel, 2001a; Hammel & Gerrity, 2012). It contained three sections: Background, Teaching Competencies, and Educational Experiences (see Appendix A).

The first section, Background, gathered demographic information, teaching setting preferences, and personal experiences of the respondents with individuals with exceptionalities. Questions in this section were forced-choice (i.e.; multiple choice), requiring either single response or multiple responses. For each forced-choice question, I provided an "other" option that allowed participants to write in their specific experience for that question if none of the option responses were appropriate, or if the option responses provided were not complete. I used data collected in this section to determine the extent to which certain conditions influenced the degree that respondents felt prepared to grasp and implement the competencies outlined by Hammel (2001b).

The second section of the questionnaire addressed the respondents' perceptions concerning their abilities to grasp and implement the competencies for teaching individuals with exceptionalities as outlined by Hammel (2001b). For each competency, the respondents indicated the degree to which they agreed or disagreed with a given competency statement. I adapted the statements developed by Hammel and Gerrity (2012) to suit the purposes of this study. The

response format was a Likert-type scale. To force choice, I used a four-point scale with a rank of "1" meaning *strongly disagree* and "4" meaning *strongly agree*.

The final section of the survey focused on the educational experiences of the participants. In this section, I investigated degree program requirements regarding the education of students with exceptionalities, inclusion of information about students with exceptionalities in methods courses, and fieldwork experiences with students with exceptionalities. Questions in this section were forced-choice, requiring either single responses or allowing for multiple responses, and open-ended, allowing the respondents to elaborate on their experiences. Again, for each forcedchoice question, I provided an "other" option that allowed participants to write in their specific experience for that question if none of the option responses were appropriate or if the option responses provided were not complete. At the end of this section, I provided a space for respondents to describe any additional thoughts or experiences that they felt contributed to their understanding of individuals with exceptionalities.

The questionnaire was reviewed for readability by three faculty members at Michigan State University. I completed a final revision based on comments made by the faculty members prior to initiating a search for participants.

Procedure

To obtain the sample, I compiled a list of institutions in the Big Ten Conference with music education programs accredited by NASM using the NASM website (nasm.arts-accredit.org). Using this list, I contacted department chairs and the faculty member in charge of programming for student teachers at qualifying institutions to see whether they would be willing to distribute the survey to their student teachers. The initial correspondence (Appendix B), sent via e-mail on March 4, 2015, included a brief description of the study, a copy of the survey tool,

and a letter to the student teachers for the faculty contact person to forward, should they elect to allow their students to participate in the study. The survey tool was distributed by the participating institution to protect the anonymity of the participants. The letter to the student teachers contained the implied consent form, as well as a link to the questionnaire (Appendix B). I sent the first reminder correspondence to the selected faculty members at the participating institutions on March 12, 2015, requesting that they distribute the letter to their students a second time to ensure maximum participation. The final notice for participation was sent to the faculty correspondent at participating institution on March 23, 2015. I identified and contacted the faculty representatives of thirteen eligible institutions within the Big 10 Conference. Eleven faculty representatives expressed interest in sharing the questionnaire with their student teachers; however one institution was unable to participate because it did not have any undergraduate students participating in their student teaching internship during the data collection period. I was unable to successfully contact faculty representatives from the two remaining institutions. Data collection ended on Sunday, April 5, 2015.

Data Analysis

The variables of interest in this study were the methods that Big 10 universities employed to prepare their music education students to work with students with exceptionalities, the degree to which music student teachers in the Big 10 felt that they grasped and could implement the essential teacher competencies outlined by Hammel (2001b), and the effect of methods of instruction on students perceptions of their preparation to work with students of exceptionalities.

To answer the first research question, I examined the responses of the students who elected to include examples of their educational experiences in the questionnaire. I grouped responses by Course Category (Special Education Course, Child Development Course,

Introduction to Education Course, Introduction to Music Education Course, Music Methods Course, Music Therapy Course, or Other), the school, college, or department that offered the course (Music Education, Music Therapy, General Education, or Other), whether the course was required or elective, and whether the course included a field experience component.

To answer the second research question, I calculated the means and standard deviations of responses to the Teacher Competencies portion of the questionnaire. I also employed descriptive statistics to present the distribution of responses. To determine the reliability of the measure, I used Cronbach's Alpha. In addition to examining responses of the entire sample, I grouped responses by the following demographic factors: teaching area preference (general, vocal, band, strings, private studio, or other), teaching level preference (birth-age 5, grades K-4, grades 5-6, grades 7-8, grades 9-12, or other), and personal experiences with individuals with exceptionalities. To determine the differences between groups within each demographic category, I used *t*-tests and one-way ANOVA.

To answer the final research question, I grouped responses to the Teaching Competencies section using the salient categories from the Educational Experiences section of the questionnaire. I used descriptive statistics and measures of central tendency to assess the relationship between the respondents' perceptions of their preparation to teach students with exceptionalities and their perceptions of their abilities to teach students with exceptionalities.

CHAPTER 4

RESULTS

I calculated reliability using Cronbach's Alpha. The reliability for the 14 competency statements in the teaching competency section of the questionnaire was high ($\alpha = .98$). The reliabilities remain high when the competencies were divided into categories based on classroom function. The first competency category, History, Legislation, and Guidelines, included the first three competency statements. The reliability for this category was $\alpha = .92$. The second competency category, Implementing Instruction, encompassed competency statements 4, 5, 8, 9, and 10. The reliability for this category was $\alpha = .95$. The third competency category, Evaluating Students and Instruction, included competency statements 6, 7, and 11. The reliability for this category was $\alpha = .92$. Finally, the fourth competency category, Classroom Environment, encompassed competency statements 12, 13, and 14. The reliability for this category was $\alpha = .90$.

Educational Experiences

The first research question addressed the ways in which NASM accredited institutions in the Big 10 Conference included educating students with exceptionalities in undergraduate music education curricula. To investigate this research question, I asked respondents to answer a series of questions about any educational experiences that they may have had pertaining to the education of students with exceptionalities over the course of their undergraduate careers. For each educational experience, I asked the respondents to provide the following information: (1) title of the course; (2) course category (i.e.; Introduction to Music Education, Special Education, General Music Methods, etc...); (3) the school, college, or department offering the course; (4) whether the course was required or elective (5) opportunities to participate in field experience with students with exceptionalities; and (6) a brief description of the ways in which content regarding students with exceptionalities was included in the course. A space was provided at the end of this section of the survey for individuals to provide additional information about their training to work with individuals with exceptionalities.

Coursework Regarding Students with Exceptionalities

Of the 33 individuals who completed the survey, 21 (63.64%) provided information about their undergraduate education experiences related to students with exceptionalities. Twenty of those individuals provided course-specific educational experiences, and one provided a reflection on his or her overall preparation to work with students with exceptionalities. Of the respondents who included course-specific educational experiences, 17 (85.00%) included a single experience, two (10.00%) included two experiences, and one (5.00%) included four experiences. The respondents reported 25 separate educational experiences in total.

Course category. I also requested that respondents provide the category, or nature, of the course. Responses to this question were forced choice and included: (1) special education course; (2) child development course; (3) introduction to education course; (4) introduction to music education course; (5) elementary/general music methods course; (6) vocal music methods course; and (7) instrumental music methods course. I provided an "other" option that allowed participants to write in a specific course category, if none of the option responses were appropriate or if the option responses provided were not complete.

Of the 25 reported educational experiences, the respondents classified 10 (40.00%) as introduction to music education coursework, and three (12.00%) as music methods coursework. In addition, respondents classified six (24.00%) as special education coursework, two (8.00%) as

introduction to education coursework, two (8.00%) as child development coursework, and one (4.00%) as educational technology coursework.

School, college, or department. Respondents also provided information about the school, college, or department that offered the coursework pertaining to the education of students with exceptionalities. Like the previous question, responses were forced choice. Option-responses included: (1) the School, College, or Department of Music; (2) the School, College, or Department of Education, and (3) the School, College, or Department of Psychology. I provided an "other" option that allowed participants to write in a specific course category if none of the option responses were appropriate or if the option responses provided were not complete.

Thirteen (52.00%) of the educational experiences provided by the respondents were offered through the School, College, or Department of Music. An additional 11 (44.00%) courses were offered through the school, college, or department of education. The remaining educational experience was an elective service project that was not affiliated with a specific School, College, or Department.

Required versus elective. In addition, I requested respondents indicate whether the educational experience was a degree requirement or elective option. As with the previous sections, responses were forced choice. The respondents indicated that 21 (84.00%) of the educational experiences reported were degree program requirements. The remaining four courses (16.00%) were elective options.

Field experience component. I also sought information about field experience opportunities associated with the coursework provided. Responses for this question were forced choice; however respondents could select as many option responses as applied to their educational experience. Option-responses included: (1) There was no field experience

requirement for this course.; (2) Observation of students and instruction in integrated and/or mainstreamed classrooms; (3) Observation of students and instruction in self-contained classrooms; (4) Provide instructional support (i.e., one-on-one assistance to students) in integrated or mainstreamed classrooms; (5) Provide instructional support in self-contained classrooms; (6) Provide instruction (i.e., teach a lesson, warm-up, or activity) in integrated or mainstreamed classrooms; and (7) Provide instruction in self-contained classrooms. Like the previous forced-choice questions, I provided an "other" option that allowed participants to write in a specific course category if none of the option responses were appropriate or if the option responses provided were not complete.

Seventeen (68.00%) of the educational experiences reported by the respondents did not require field experience in self-contained or integrated classroom environments. Of the courses that did require field experience (n = 7; 28.00%), five courses (20%) required the respondents to observe students and instruction in self-contained and/or integrated classroom settings. The remaining two courses (8.00%) with a field experience component required the respondents to provide instructional support or direct instruction to students with exceptionalities in self-contained and/or integrated classroom settings. In addition, of the courses with field experience components, five (20.00%) were required courses in the respondents' degree programs.

Course description. Finally, I asked respondents to provide a detailed description of their educational experiences. Specifically, I asked them to briefly describe the ways in which content regarding students with exceptionalities was included in their course. To guide their description, I asked them to include the amount of time spent on material, resources with which they were provided, and any other information that they felt was helpful in deepening their understanding of working with students with exceptionalities.

Respondents provided detailed descriptions of how the education of students with exceptionalities was integrated into their coursework for 19 of the 25 educational experiences (76.00%). Eight (32.00%) respondents indicated enrolling in courses pertaining exclusively to the education of students with exceptionalities. Course specific educational experiences for respondents who did not enroll in courses pertaining exclusively to the education of students with exceptionalities belonged to three groups: (1) courses with two or fewer class periods devoted to students with exceptionalities (n = 7; 28.00%); (2) courses with several lectures or a complete unit devoted to students with exceptionalities (n = 3; 12.00%); and (3) courses with material devoted to students with exceptionalities woven organically into each lecture (n = 1; 4.00%). The majority of respondents (n = 10; 40.00%) reported spending the most instructional time on the history, legislation, and definitions associated with the education of students with exceptionalities, and fewer reported spending a great deal of time identify characteristics of specific exceptionalities, instructional strategies, and tools appropriate for teaching each population (n = 3; 12.00%).

Additional Experiences with Students with Exceptionalities

In addition to educational experiences, I asked respondents to provide any additional information about their educational experiences pertaining to teaching students with exceptionalities, such as required volunteer work, ensemble experiences, or service-learning projects. Twelve respondents (36.36%) elected to include additional information.

Four respondents (12.12%) reported feeling inadequately prepared to teach students with exceptionalities. One respondent remarked that he or she "had very little experience in education of students with exceptionalities," and a second stated that he or she did not "have enough experience working with students with exceptionalities." In addition, one respondent reported

that material pertaining to the education of students with exceptionalities was "covered tangentially in several classes" but he or she had "never been evaluated on it in any depth before." Finally, one student teacher indicated that his or her institution did not offer a course in special education. These responses suggest a need for incorporation and intentional integration of material pertaining to the education of students with exceptionalities into the undergraduate music education curricula at some institutions.

In addition, four respondents (12.12%) described encounters with individuals with exceptionalities within their student teaching. All four respondents indicated having limited or no contact with students with exceptionalities prior to their student teaching placement. Three of the four respondents described the methods that their cooperating teacher employed to include individuals with exceptionalities in the music classroom, and one respondent (3.03%) stated that student teaching had been "the most helpful experience" in preparing him or her to work with students with exceptionalities. These responses reinforce the need for more contact time with individuals with exceptionalities during field experiences prior to the student teaching internship.

Finally, four respondents (12.12%) provided general information about their overall preparation to teach individuals with exceptionalities. These experiences included additional unlisted coursework, elective honors-option projects, optional supplemental readings, and interactions with peers with exceptionalities.

Self-Evaluation of Competency

To evaluate the degree to which current student teachers felt they could grasp and implement the essential competencies outlined by Hammel (2001b), I asked that respondents to indicate the degree to which they agreed or disagreed with fourteens statements that paralleled Hammel's (2001b) competencies. I modified statements from the survey tool developed by

Hammel and Gerrity (2012) and rearranged the order of presentation to suit the purpose of this study. Each statement was worded positively and had four option responses; "1" for *strongly disagree*, "2" for *disagree*, "3" for *agree*, and "4" for *strongly agree*. The distribution of scores for each competency can be found in Table 1. The measures of central tendency for each item can be found in Table 2.

Pating	Strongly Disograp	Dicograa	Agroo	Strongly Agroo
Compotency Is	Jam awana of the ways i	Disagi ee	Agree duala with Diaghil	itian Education Act
(IDEA)	Tam aware of the ways t	n which the individ	iuais wiin Disadii	illes Education Act
(IDEA) can imp	pact instruction in the mu	sic classroom	1.6	2
N	3	11	16	3
Percentage	9.09%	33.33%	48.48%	9.09%
Competency 2: I feel prepared to participate in decision making processes related to the education of students with exceptionalities (i.e.; setting IEP goals, placement decisions, etc.).				
Ν	5	11	10	7
Percentage	15.15%	33.33%	30.30%	21.21%
Competency 3: in my future cle	I feel prepared to commu assroom.	unicate and collabo	orate with special	education personnel
Ν	2	2	20	9
Percentage	6.06%	6.06%	60.61%	27.27%
Competency 4: in my future cle N Percentage	r I feel prepared to addres assroom. 4 12.12%	ts the educational of 9 27.27%	needs of students v 13 39.39%	with exceptionalities 7 21.21%
Competency 5: I feel prepared to utilize appropriate materials to meet the diverse learning abilities of students in my future classroom.				
Ν	1	11	13	8
Percentage	3.03%	33.33%	39.39%	24.24%
Competency 6: I feel prepared to develop and use informal assessment procedures for students with exceptionalities in my future classroom.				
IV Democratica e	1	7	10	7
Percentage	5.03%	21.21%	48.48%	21.21%
Competency 7: I feel prepared to monitor the progress of students with exceptionalities in my future classroom.				
1 V	1	5	$\angle 1$	U

Table 1Distribution of responses to competency statements with percentages (N=33)

15.15%

63.64%

18.18%

3.03%

Percentage

Table 1 (cont'd)				
Competency 8: If	eel prepared to ider	tify areas of difficult	y for students with e	xceptionalities in
my future classroo	om.			
Ν	1	4	19	9
Percentage	3.03%	15.15%	57.58%	27.27%
Competency 9: If	eel prepared to mod	lify instruction to acc	commodate students	with
exceptionalities in	n my future classroo	т.		
Ν	0	12	14	7
Percentage	0.00%	36.36%	42.42%	21.21%
Competency 10: I	feel prepared to ad	apt instructional mat	erials to provide for	individual
differences in my	future classroom.			
N	1	13	12	7
Percentage	3.03%	39.39%	36.36%	21.21%
Competency 11: I	feel prepared to ev	aluate the effectivene	ss of my instruction	and music
program goals for	r students with except	ptionalities in my futu	ire classroom.	
N	1	11	16	5
Percentage	3.03%	33.33%	48.48%	15.15%
Competency 12: I	feel prepared to mo	odify the physical env	ironment of my futu	re classroom to
accommodate stud	dents with exception	alities.		
Ν	1	7	19	6
Percentage	3.03%	21.21%	57.58%	18.18%
Competency 13: I	feel prepared to eff	fectively address class	sroom management	issues involving
students with exce	ptionalities in my fi	iture classroom.	Ũ	0
Ν	1	14	14	4
Percentage	3.03%	42.42%	42.42%	12.12%
Competency 14: I classroom.	feel prepared to ad	dress social interacti	ons among all stude	nts in my future
N	0	8	19	6
Percentage	0.00%	24.24%	57.58%	18.18%

The distribution of scores for the individual items varied. Competency statements 3, 6, 7, 8, 12, and 14 were all leptokurtic and skewed to the left. This distribution indicated that the majority of respondents felt they had adequate knowledge of the information and skills necessary to teach individuals with exceptionalities. Competency statements 1, 4, 5, 9, and 11 were more normally distributed; however they were still skewed to the left. Although this distribution

suggested that the majority of respondents felt adequately prepared to teach individuals with exceptionalities, it, along with the higher standard deviations, also suggested more diverse responses indicative of differences in degree of preparation within the population. The remaining competency statements, 2, 10, and 13, were normally distributed. The distribution for these items suggested that, for these skills, approximately half of the respondents felt prepared and half of the respondents did not feel prepared to teach children with exceptionalities.

For the purpose of this study, the degree to which respondents understood and felt prepared to implement the competencies outlined by Hammel (2001b) was represented by their composite competency score. To calculate the composite competency score, I added the individual competency score for each competency statement, 14 statements in total. Therefore, the composite competency score could have been as low as 14 or as high as 56. The mean composite score for this sample was 39.78 (sd = 8.13). The distribution of the composite competency scores indicated that the majority of respondents (63.64%) agreed or strongly agreed with the competency statements (see Figure 1), suggesting that most respondents feel adequately prepared to teach students with exceptionalities.



Figure 1 Distribution of teaching competency scores for all respondents (N = 33)

(strongly disagree) to 4 (strongly agree)			
Ite	m	Μ	SD
1.	I am aware of the ways in which the		
	Individuals with Disabilities Education Act		
	(IDEA) can impact instruction in the music		
	classroom.	2.58	0.78
2.	I feel prepared to participate in decision		
	making processes related to the education of		
	students with exceptionalities (i.e.; setting IEP		
	goals, placement decisions, etc.).	2.58	0.99
3.	I feel prepared to communicate and collaborate		
	with special education personnel in my future		
	classroom.	3.09	0.75
4.	I feel prepared to address the educational needs		
	of students with exceptionalities in my future		
	classroom.	2.70	0.94
5.	I feel prepared to utilize appropriate materials		
	to meet the diverse learning abilities of students		
	in my future classroom.	2.85	0.82
6.	I feel prepared to develop and use informal		
	assessment procedures for students with		
	exceptionalities in my future classroom.	2.88	0.77
7.	I feel prepared to monitor the progress of		
	students with exceptionalities in my future		
	classroom.	2.97	0.67
8.	I feel prepared to identify areas of difficulty for		
	students with exceptionalities in my future		
_	classroom.	3.09	0.71
9.	I feel prepared to modify instruction to		
	accommodate students with exceptionalities in	• • •	0 - 1
	my future classroom.	2.85	0.74
10	. I feel prepared to adapt instructional materials		
	to provide for individual differences in my	2 - <i>i</i>	0.00
1.1	tuture classroom.	2.76	0.82
11	. I feel prepared to evaluate the effectiveness of	2 - <i>i</i>	0 = 1
10	my instruction in my future classroom.	2.76	0.74
12	. I feel prepared to modify the physical		
	environment of my future classroom to	2 01	0.71
10	accommodate students with exceptionalities.	2.91	0./1
13	. I feel prepared to effectively address classroom		
	management issues involving students with		0.72
14	exceptionalities in my future classroom.	2.64	0./3
14	. I feel prepared to address social interactions	2.04	0.65
	among an sudents in my future classroom.	∠.94	0.05

Table 2	Means and standard deviations for the degree to which participants agree or
	disagree with preparedness statements related to the competencies from 1
	(strongly disagree) to 4 (strongly agree)

To further detail respondents' feelings of preparedness, I divided the 14 competency statements into four overarching categories based on the function they served within a classroom: (1) History, Legislation, and Guidelines (competencies 1, 2, and 3); (2) Implementing Instruction (competencies 4, 5, 8, 9, and 10); (3) Evaluating Students and Instruction (competencies 6, 7, and 11); and (4) Classroom Environment (competencies 12, 13, and 14). Due to differences in the number of items in each category, the degree to which respondents understood and felt prepared to implement the competencies was represented by the mean competency score. To calculate the mean competency score, I added the individual competency score by the number of respondents to yield the mean competency score. The measures of central tendency and reliability for each competency category are reported in Table 3.

	Μ	SD	α
Category 1: History, Legislation, and Guidelines (Score Range 3-12)	8.24	2.06	.92
Category 2: Implementing Instruction (Score Range 5-20)	14.24	3.38	.95
Category 3: Evaluating Students and Instruction (Score Range 3-12)	8.61	1.87	.92
Category 4: Classroom Environment (Score Range 3-12)	8.48	1.65	.90

Table 3Measures of central tendency for teaching competency categories.

The distribution of scores for History, Legislation, and Guidelines were relatively normal, suggesting a lack of agreement in the degree of knowledge the respondents had of the history, laws, and regulations associated with the education of students with exceptionalities (Figure 2). The distribution of scores for Implementing Instruction were also somewhat normal, but skewed to the left, suggesting that the majority of respondents "agreed" or "strongly agreed" with statements pertaining to their preparation to provide, modify, and adapt instruction to suit the needs of students with exceptionalities in their classroom (Figure 3). In addition, the distribution of scores for Implementing Instruction suggests a lack of agreement about degree of preparedness, resulting in variability more consistent with that of a normal distribution. The distribution of scores for Evaluating Students and Instruction was leptokurtic and skewed to the left, suggesting a number of respondents felt prepared to assess students and the efficacy of instruction (Figure 4). The distribution suggests there was general agreement about degree of preparedness, resulting in less variability than would be true in a normal distribution. Finally, the distribution of scores for Classroom Environment were also leptokurtic and skewed to the left, suggesting that a number of respondents felt adequately prepared to manage the social, emotional, and physical aspects of the classroom environment (Figure 5).

The standard deviation for Implementing Instruction was greatest, suggesting a lack of agreement about the degree to which the respondents felt prepared to modify, adapt, and implement instruction in classrooms containing students with exceptionalities. The standard deviation was slightly smaller for History, Legislation, and Guidelines, suggesting a lack of agreement about the degree to which respondents understood the history, laws, and regulations associated with the education of students with exceptionalities. The final two categories, Evaluating Students and Instruction and Classroom Environment, had the smallest standard

deviations, suggesting there was general agreement about the degree of preparedness, resulting in less variability in both categories.

The means suggest that respondents felt most prepared to evaluate students and instruction, as well as modify, adapt, and implement instruction. Respondents felt almost equally as prepared to modify of the classroom environment to meet the needs of students with exceptionalities in their future classrooms. The means suggest students felt least secure in their knowledge of the history, legislation, and guidelines associated with the education of students with exceptionalities. Conversely, the standard deviations suggest a great deal of variance in the degree of preparation respondents felt to implement instruction, suggesting that the respondents may not be prepared as they seem to modify and adapt instruction for students with exceptionalities.

Essential Teaching Competencies by Teaching Area Preference

To assess the relationship between teaching area preference and perceptions of preparedness to teach individuals with exceptionalities, I grouped responses to the essential teaching competencies portion of the survey using the teaching area preferences reported in question four of the questionnaire (see Appendix A). Respondents were allowed to choose more than one teaching setting preference, which means that the responses total more than 100%. Of the 33 respondents, 15 (45.45%) indicated a desire to teach general music, 9 (27.27%) indicated a desire to teach choir, 17 (51.52%) indicated a desire to teach band, 4 (12.12%) indicated a desire to teach strings, and 13 (39.39%) indicated a desire to teach in a private studio setting. In addition, two respondents (6.06%) indicated a desire to work with "other" populations, including children with exceptionalities and adults.



Figure 2 Distribution of teaching competency composite scores for History, Legislation, and Guidelines (N = 33)



Figure 3 Distribution of teaching competency composite scores for Implementing Instruction (N = 33)



Figure 4 Distribution of teaching competency composite scores for Evaluating Students and Instruction (N = 33)



Figure 5 Distribution of teaching competency composite scores for Classroom Environment (N = 33)

The means in Table 4 suggest that respondents who preferred to teach strings felt least prepared to teach students with exceptionalities, while respondents who preferred to teach in "other" teaching environments felt most prepared. Respondents who indicated a preference for teaching in general music, choir, or private studio settings felt similarly prepared to meet the competencies outlined in Hammel (2001b); however the means did not vary greatly from that of respondents who preferred to teach in "other" teaching settings. The means suggest that respondents who preferred to teach band felt more prepared to meet the competencies than respondents who preferred strings; however, they felt less prepared than respondents indicating all other teaching preferences. Although there were trends in the differences between the means of each teaching area group, the results of the one-way ANOVA show that none of the differences were statistically significant (f = .51; p > .05).

by teaching area preference.			
Item	М	SD	
General Music	41.73	6.35	
Choir	41.22	8.44	
Band (Concert, Jazz, Marching)	39.35	7.84	
Strings (Chamber, Symphonic, Mariachi)	36	7.73	
Private Studio	41.38	7.02	
Other	43	5	

Table 4Means and standard deviation of essential teacher competency composite scores
by teaching area preference.

Essential Teaching Competencies by Teaching Level Preference

To ascertain the relationship between teaching level preference and perceptions of preparedness to teach individuals with exceptionalities, I grouped responses to the essential teaching competencies portion of the survey using the teaching level preferences reported in question five of the measure (see Appendix A). Respondents were allowed to choose more than one teaching level preference, which means that the responses total more than 100%. Of the 33 respondents, 3 (9.09%) indicated a desire to teach early childhood (birth-age 4), 12 (36.36%) indicated a desire to teach at the elementary level (Grades K-4), 21 (63.64%) indicated a desire to teach at the intermediate level (grades (5-6), 23 (69.70%) indicated a desire to teach at the junior high school level (grades 7-8), and 21 (63.64%) indicated a desire to teach at the high school level (grades 9-12). In addition, three respondents (9.09%) indicated a desire to work at "other" teaching levels, including collegiate and beyond.

The means in Table 5 suggest respondents who preferred to teach outside of the K-12 environment felt most prepared to meet the competencies outlined by Hammel (2001b), while respondents indicating a preference to teach early childhood felt least prepared. Respondents indicating K-12 teaching level preferences were closely grouped around the mean for the sample (m = 39.58, sd = 8.13), with those indicating a preference for teaching at the elementary level feeling most prepared, followed closely by intermediate, senior high, and junior high levels. Although there were trends in the differences between the means of each teaching level group, the results of the one-way ANOVA show that none of the differences were statistically significant (f = 1.53; p > .05).

Essential Teaching Competencies by Personal Experience

To explore the relationship between personal experiences with individuals with exceptionalities and perceptions of preparedness to teach individuals with exceptionalities, I grouped responses to the essential teaching competencies portion of the survey using the personal experience information reported in questions six and seven of the measure (see Appendix A). Of the 33 respondents, 14 (42.42%) indicated having personal experience with

individuals with exceptionalities, 16 (48.48%) indicated having no personal experience with individuals with exceptionalities. Two respondents (6.06%) did not record a response. The mean competency score for the respondents who had personal experience with individuals with exceptionalities (m = 41.93, sd = 5.82) was greater than the mean for the respondents who had no personal experience with individuals with exceptionalities (m = 35.69, sd = 7.53). The differences between the two means was statistically significant at the .05 level (t = 2.43). Respondents with personal experiences with individuals with exceptionalities felt more prepared to teach individuals with exceptionalities than respondents without those experiences.

by leaching level prej		
Item	М	SD
Early Childhood (Birth–Age 4)	37.33	2.05
Elementary (Grades K-4)	40.25	5.42
Intermediate (Grades 5-6)	39.29	6.68
Junior High School (Grades 7-8)	38.22	8.03
Senior High School (Grades 9-12)	38.52	8.79
Other	50.67	6.18

Table 5Means and standard deviation of essential teacher competency composite scores
by teaching level preference.

Educational Experiences and Essential Teaching Competencies

The final research question addressed the effect of the educational experiences of the respondents on the degree to which they felt prepared to understand and implement the competencies outlined by Hammel (2001b). Of the 33 individuals who completed the survey, 21
(63.64%) provided information about their undergraduate education experiences pertaining to individuals with exceptionalities. The mean competency score for the respondents who reported education experiences pertaining to the education of individuals with exceptionalities (m = 41.95, sd = 6.95) was greater than the mean for the respondents who did not provide any educational experiences (m = 35.42, sd = 8.38). The difference between the two means was statistically significant (t = 2.33, p < .05). The difference between the two groups suggested that respondents who reported educational experiences related to the education of students with exceptionalities may be more prepared to teach individuals with exceptionalities than respondents without those experiences.

To define the effects of educational experiences on the degree to which respondents agreed or disagreed with the competency statements more clearly, the respondents who provided educational experiences were grouped according to the school, college, or department that offered the courses in which the respondents learned about teaching students with exceptionalities. The individuals who had experiences in the School, College, or Department of Music and the School, College, or Department of Education are represented in both samples. Of the 21 respondents who provided educational experiences, 15 (71.43%) completed coursework in the School, College, or Department of Music and 7 (33.33%) completed coursework in the School, College, or Department of Education. The mean for the respondents who completed coursework in the School, College, or Department of Education (m = 42.43, sd = 6.65) than the mean for the respondents who completed coursework in the School, College, or Department of Education (m = 41.73, sd = 6.87). The difference between the two means was not statistically significant (t = .21, sd = 6.65). These results suggest that the school, college, or department through which coursework pertaining to the education of students with exceptionalities is offered

had little impact on the degree to which the respondents felt prepared to teach students with exceptionalities.

To further describe the effects of educational experiences on the degree to which respondents agreed or disagreed with the competency statements, I separated the composite competency scores into groups based on whether they had participated in required field experience with students with exceptionalities. Of the 20 respondents who reported enrolling in coursework with special education components, 8 (40.00%) reported engaging in field experiences while enrolled in the reported coursework. The mean for the respondents who engaged in field experiences was greater (m = 43.80, sd = 8.80) than the mean for the respondents who did not engage in field experiences (m = 40.5, sd = 5.21). Although according to the mean trends, the respondents who engaged in educational experiences with and without field experience requirements felt prepared to teach students with exceptionalities, the difference between the two means was not statistically significant (t = 1.02, p > .05). These results suggest that engaging in field experiences with students with exceptionalities; however, the small sample size made it challenging to find a statistically significant difference.

CHAPTER 5

DISCUSSION, SUMMARY, AND CONCLUSIONS

The purpose of this study was to examine the effect of different teaching practices in higher education of students with exceptionalities on the perceptions of student teachers in those programs concerning their preparation to teach students with exceptionalities. Specifically, this study examined (1) the methods of instruction employed by institutions of higher education to prepare future music educators to work with students with exceptionalities; (2) the degree to which students felt they could grasp and implement the essential competencies for teaching students with exceptionalities outlined by Hammel (2001b); and (3) the effects of different methods of instruction on student teachers' perceptions of their preparation to work with students with exceptionalities.

To evaluate these questions, I developed a questionnaire instrument by reviewing literature, consulting with veteran researchers in the field, and seeking input from music education faculty members. The questionnaire was divided into three parts: (1) Background; (2) Essential Teaching Competencies; and (3) Educational Experiences. The final section of the questionnaire provided respondents with the opportunity to describe undergraduate coursework that they completed pertaining to the education of students with exceptionalities, as well as comment upon their beliefs of their overall preparation. The questionnaire was reviewed by three faculty members at Michigan State University, and I incorporated their suggestions prior to distributing the questionnaire.

I sent an e-mail correspondence to the department chairs and faculty members in charge of the student teaching internship at institutions within the Big 10 Conference with music education programs accredited through NASM. The correspondence contained a request for

participation (Appendix B), a copy of the research tool (Appendix A), and a letter to be distributed electronically to the student teachers at their institution. The letter to the student teachers contained a live link to the questionnaire, hosted on SurveyMonkey.com (Appendix C). The faculty distributed the survey to 155 undergraduate student teachers at 10 different institutions. Thirty-three respondents answered the questionnaire during the four weeks the questionnaire was available.

Findings

Educational Experiences

Of the respondents who completed the survey, 64% reported information about their undergraduate educational experiences that addressed teaching students with exceptionalities. A lack of consistent findings in the related research regarding preservice music educator access to coursework pertaining to teaching students with exceptionalities makes it challenging to assess whether this is typical. While Colwell and Thompson (2000) found that 86% of institutions require at least one course in special education as part of their undergraduate degree program, Hahn (2010) found thatonly 59.2% of individuals who had completed undergraduate music education programs had enrolled in coursework that included information about the education of individuals with exceptionalities.

There are several possible explanations for these inconsistencies. First, it is possible that the difference is due to the population surveyed. Colwell and Thompson (2000) conducted a national survey, whereas Hahn surveyed music educators in Pennsylvania. The majority of the respondents in the present study attended institutions of higher education in the Midwest, which may account for the differences in response rates. It is also possible that completing coursework pertaining to the education of students with exceptionalities is not a prerequisite for the student

teaching internship at some institutions or in some states. During the data collection process, a faculty member in charge of student teaching indicated that coursework pertaining to the education of students with exceptionalities was offered following the completion of the student teaching internship at one of the participating institutions. Although no other department chair or faculty member in charge of student teaching provided information regarding their instructional sequence, it is possible that other institutions may offer special education coursework following the student teaching internship. It is also possible that coursework pertaining to the education of individuals with exceptionalities was either not required at, or not offered by, some of the participating institutions. Heller (1994) found that nearly 60% of institutions did not have a course requirement designed to prepare preservice music teachers to work with students with exceptionalities, and Colwell and Thompson (2000) found that one in four institutions does not have a special education course available to music education majors..

The results suggest vast discrepancies in the ways in which institutions of higher education prepare preservice music educators to teach students with exceptionalities. Twentyone respondents, representing 10 institutions, identified 25 separate educational experiences. The course-specific educational experiences pertaining to the education of students with exceptionalities reported by the respondents were typically offered through the School, College, or Department of Music (52.00%) or the School, College, or Department of Education (44.00%). Courses offered through the School, College, or Department of Music included Introduction to Music Education (76.93%) and Music Methods (23.08%) classes. Coursework offered by the School, College, or Department of Education included Introduction to Education (18.18%), Special Education (54.55%), Child Development (18.18%), and Educational Technology (9.09%) classes.

The results also indicated that an extremely small percentage of respondents participated in field experiences with individuals with exceptionalities. The majority (68%) of the coursework reported by the respondents did not have a field experience requirement in integrated or self-contained classroom settings. Of the respondents who indicated participating in field experiences with individuals with exceptionalities, the majority observed instruction in inclusive teaching settings. Only a fraction assisted in instruction, working one-on-one with a student with exceptionalities, and only two taught a lesson in integrated and/or self-contained classroom settings.

The findings of Schmidt (1989) gave credence to the lack of consistency in course offerings and course content across institutions found in the present study. In his examination of coursework available to preservice music educators, Schmidt (1989) found inconsistencies in course offerings and a lack of agreement regarding priorities in some content areas between institutions. The number of courses available, the methods by which material was incorporated into content-specific coursework, and the disagreement in the value of field experience as a part of the curriculum suggest that institutions have yet to agree on the appropriate course of instruction for preservice music educators as it pertains to the education of students with exceptionalities.

In addition, Colwell and Thompson (2000) and Schmidt (1989) noted that coursework devoted exclusively to the education of students with exceptionalities typically was taught by someone other than a music education faculty member or occurred in the School, College, or Department of Education. The results suggest that the School, College, or Department of Music and the School, College, or Department of Education shared in the responsibility of teaching preservice music educators about students with exceptionalities; however, the results also

suggested that the School, College, or Department of Education was responsible for providing the bulk of special education coursework. Although the results suggest a greater number of access points for preservice music educators to receive information about students with exceptionalities within the School, College, or Department of Music, it is apparent that the responsibility of ensuring that preservice music educators are prepared to teach students with exceptionalities still lies with the School, College, or Department of Education.

The results also suggest a great deal of variance in the time spent on material pertaining to the education of students with exceptionalities. It is challenging to corroborate this finding, because the research in this area has focused on coursework devoted to the education of students with exceptionalities rather than coursework that includes, but does not emphasize, the topic. Although Heller (1994) found that material pertaining to mainstreaming most frequently was included in general music methods classes and introduction to music education coursework, she did not examine the amount of time spent on said material in those classes. Both Heller (1994) and Salvador (2010) found that the amount of time spent on material pertaining to the education of students with exceptionalities was related strongly to the faculty instructor's preservice music education experiences and their experiences teaching students with exceptionalities. Unfortunately, the preparation of university faculty was not within the scope of this study; therefore it is difficult to assess whether this relationship played a role in the difference in time allotted to material pertaining to the education of students with exceptionalities.

Essential Teaching Competencies

Results suggest that the majority of respondents felt prepared to implement the competencies outlined by Hammel (2001b). Respondents indicated having a great deal of confidence in their understanding of the history of special education, special education law, and

the ways in which special education law impacts classroom teaching. In addition, respondents had a great deal of confidence in their abilities to evaluate students and instruction, as well as foster and maintain an appropriate classroom environment. The distribution of scores for competency statements related to providing, modifying, and adapting instruction to suit the needs of diverse learners suggest that preservice teachers did not feel as prepared to accomplish these tasks.

Due do inconsistencies in the related research, it is challenging to corroborate these findings. McCord and Watts (2010) substantiate these results, finding that less than 10% of inservice music teachers rate their knowledge and skill in adapting music education goals and objectives for students with exceptionalities as adequate. Conversely, Gilbert and Asmus (1981) found that in-service teachers needed more instruction on the implications of federal legislation for inclusion in the music classroom.

There was a trend in, but not statistically significant, difference between the mean competency score of respondents who indicated a preference for general music and the mean competency sores of respondents with any other teaching preference. In addition, there was an observable, but not statistically significant difference, between the mean competency score of respondents who indicated a preference for teaching at the elementary level and the mean competency scores of respondents with any other teaching level preference. These observations suggest that individuals who prefer to teach elementary general music may be better prepared than their peers with other teaching preferences to teach students with exceptionalities; however, the small sample size may have made it difficult to find statistical significance.

A number of studies examining the ways institutions of higher education prepare preservice music educators to teach students with exceptionalities suggest that music-specific

training typically occurs in the Elementary General Music Methods course (Heller, 1994; Salvador, 2010). Therefore, it is possible that these findings are a result of education experiences as a product of teaching area preference, rather than teaching area preference itself.

The background characteristic that seemed to have the greatest impact on the degree to which respondents agreed or disagreed with the competency statements was whether the respondent had personal experience with individuals with exceptionalities. There was a statistically significant difference between the respondents who self-identified as having had personal experiences with individuals with exceptionalities and those who reported having no experience with individuals with exceptionalities. This finding suggests that personal experience may contribute to ones feelings for preparedness to teach individuals with exceptionalities.

Currently, no research exists examining the relationship between personal experiences with individuals with exceptionalities and perceptions of preparedness to teach students with exceptionalities. The most closely related research examines personal experiences with individuals with exceptionalities and attitudes toward mainstreaming and inclusion in the music classroom. Both White (1981) and Darrow (1999) found that positive experiences with individuals with exceptionalities increased an individual's willingness to include students with exceptionalities in the classroom. If positive attitudes are a precursor for successful inclusion of individuals with exceptionalities (Ansuini, 1979), then it is conceivable that positive personal experiences with individuals with exceptionalities could increase an individual's perception of their preparedness to teach this population; however, more research is necessary to substantiate this hypothesis.

Educational Experiences and Essential Teaching Competencies

The final research question addressed the effect of educational experiences on respondents' perceived ability to grasp and implement the competencies outlined by Hammel (2001b). There was a difference in perceived preparedness to teach students with exceptionalities between those respondents who reported educational experiences and those respondents who did not report educational experience. There was a trend in, but not statistically significant difference between, the means of the individuals who participated in educational experiences with a required field experience component and the means of individuals who participated in educational experience with no field experience requirement. A substantial body of research exists supporting these findings.

In her examination of music teachers' perceptions of their preparation for mainstreaming Hammel (2001a) found that teachers felt ill-equipped to meet the needs of students with exceptionalities in their classrooms. In addition, she found that 76% of respondents had fewer than five hours of experience observing students with exceptionalities, and 64% had fewer than five hours of experience teaching students with exceptionalities during their preservice training. Hahn (2010) also found that teachers felt ill-prepared to meet the needs of students with exceptionalities in their classrooms. In addition, she found that only 60% of respondents had taken at least one undergraduate course that included information about students with exceptionalities, and only 45% had access to field experiences with students with exceptionalities while enrolled in the course. Several studies by VanWeelden and Whipple (2005, 2007, 2013) suggest that preservice teachers feel more prepared to teach students with exceptionalities after completing music-specific special education coursework with field experience components.

Implications

Although several decades have passed since IDEA was signed into law, methods employed by institutions of higher education to prepare preservice music educators to teach individuals with exceptionalities remain largely unchanged. Inconsistencies in course offerings, amount of instructional time devoted to material pertaining to the education of students with exceptionalities, the material covered, and access to field experiences suggests a lack of agreement on the best ways to approach special education coursework in undergraduate music education curricula. The results suggest individuals are confident in their understanding of the implications of special education law, their ability to evaluate students and instruction, and their ability to monitor and adjust the social, emotional, and physical environment of their classroom to suit individuals with exceptionalities. In addition, the results suggest that individuals may not be as prepared to modify, adapt, and implement instruction in integrated and/or self-contained settings. In addition, the results suggest that individuals who have engaged in educational experiences pertaining to the education of individuals with exceptionalities feel more prepared to meet the needs of students with exceptionalities in their future classrooms than individuals who did not participate in those experiences. Finally, the results suggest engagement in field experience may also increase an individual's perceived preparation to teach individuals with exceptionalities.

If 99% of music educators provide instruction to individuals with exceptionalities (VanWeelden & Whipple, 2013), it is imperative that preservice music educators be prepared to meet the instructional needs of students with exceptionalities in their classrooms. One of the ways institutions of higher education could prepare future music teachers to address the instructional needs of students with exceptionalities is by offering a sequential course of

instruction with a field experience component that addresses the historical, theoretical, and practical aspects of teaching students with exceptionalities. Should institutions of higher education be unable to incorporate music-specific special education courses into their curricula, an effort should be made to include material pertaining to the education of students with exceptionalities in introductory and music methods classes in the music education course sequence. In these settings, it is essential for music education faculty to collaborate to ensure that material is appropriately sequenced and addresses the historical, theoretical, and practical aspects of special education. If music education faculty members feel ill-prepared to present this material, faculty in the School, College, or Department of Music should collaborate with faculty in the School, College, or Department of Education to ensure that preservice music educators are provided with the knowledge necessary to be successful educators. In addition, as field experiences seem to help students feel more prepared to teach students with exceptionalities, it is essential that preservice music educators be provided as many opportunities as possible over the course of their undergraduate careers to interact with students with exceptionalities; therefore, structured field experience opportunities in inclusive and self-contained settings should be incorporated into these methods courses as well.

Suggestions for Future Research

Several limitations existed within this study. This study was based on a researcherdeveloped instrument that was not pilot tested. The questionnaire was answered by 33 respondents, slightly greater than 20% of the population sample of undergraduate students enrolled in their student teaching internship at institutions within the Big 10 Conference during the spring semester of the 2014-2015 academic year. Distributed across the 10 participating institutions, the response rate was not large enough to provide an accurate picture of the

educational practices of these institutions. The small sample size also made it difficult to find statistically significant differences between teaching area and teaching level preferences, as well as between individuals who have participated in field experiences and individuals who have not participated in field experiences. The questionnaire was distributed to the respondents via e-mail by faculty members at participating institutions. Direct communication with the student teachers may have yielded a higher response rate. This study should be replicated using a refined data collection process involving a larger sample of preservice music educators and a more direct ways of communicating with the respondents to increase the sample size.

The questionnaire design may have impacted the validity of this study as well. To identify the degree to which respondents felt prepared to teach individuals with exceptionalities, I relied heavily upon the competencies outlined in Hammel (2001b), which she developed through interviews, questionnaires, and observations of elementary general music teachers. To date, no additional research has been done to corroborate her findings, nor have the competencies been applied in situations outside the general music setting. It is possible that the research tool is biased toward elementary general music teachers because of the nature of the competency statements. In addition, I positively coded the competencies portion of the questionnaire was utilized in earlier research (Hammel & Gerrity, 2012) and found to be appropriate for this study, a different response format might have provided different results.

Like those of Salvador (2010), the findings of this study suggest a need for additional research into the significance of content-specific special education coursework in the preparation of future music educators. Other areas for research include the way material pertaining to the education of students with exceptionalities is included in specific music education coursework

such as general, choral, and instrumental music methods courses, as well as the relationship between personal experiences with individuals with exceptionalities and perceived preparation.

Conclusion

This study contributes to the field of music teacher preparation as it pertains to the education of students with exceptionalities. The respondents to this questionnaire represented a varied cross-section of preservice music teachers interested in teaching across all grade levels and specialty areas spanning institutions in several states. The findings of this study suggest that preservice music teachers feel adequately prepared to teach students with exceptionalities; however, the degree of preparedness varies a great deal based upon personal experiences with individuals with exceptionalities and educational experiences pertaining to teaching students with exceptionalities. Based on these findings, there appears to be a need for additional research into the ways in which material pertaining to the education of students with exceptionalities is incorporated into undergraduate music education curricula. In addition, there appears to be a need for the development of a sequential course of instruction with a field experience component to ensure that preservice music educators are provided with the knowledge necessary to be successfully integrating students with exceptionalities into their future classrooms. Overall, the findings suggest a need for continued examination of the manner in which undergraduate music education majors are prepared and perceive their preparation to teach students with exceptionalities.

APPENDENCIES

Appendix A

Questionnaire

Figure 6Sample of data collection tool

Perceptions of Preservice Music Educators Concerning their Ability to

Thank you for participating in this study!

I am looking forward to your perspectives concerning your preparation to teach students with exceptionalities. Your responses will remain confidential and will be used only for the purposes of this study. You indicate your agreement to participate in this study by completing and returning this survey.

Click next to begin, and thank you for participating!

Perc	eptions of Preservice Music Educators Concerning their Ability to
Bac	kground Information
Are	you currently enrolled in a degree-granting Music Education program?
c	Yes
c	No
Are	you currently an undergraduate student?
c	Yes
c	No
Are	you currently student teaching?
c	Yes
c	No
What	at is your ideal teaching area? (Select all that apply)
	General Music
	Chorus
	Band (Concert, Jazz, Marching)
	Strings (Orchestra, Chamber, Mariachi)
	Private Studio
	Other (please specify)
Wha	at is your ideal teaching level? (Select all that apply)
	Early Childhood (Birth-Age 5)
	Elementary (Grades K-4)
	Intermediate (Grade 5-6)
	Junior High (Grade 7-8)
	High School (Grade 9-12)
П	Other (please specify)
Do	you have any non-academic experience with individuals with exceptionalities?
c	Yes
C	No

f you answered "yes"	to the previous question, please provide a brief explanation of y	you
experiences with indiv	duals with exceptionalities.	
	T .	

ssential Teacher	Competencies			
Select the response the following states	e that best represe ments,	nts the degree to	which you agree	e or disagree with
	Strongly Disagree	Disagree	Agree	Strongly Agree
I am aware of the ways in which the Individuals with Disabilities Education Act (IDEA) can impact instruction in the music classroom.	r	r	r	r
I feel prepared to participate in decision making processes related to the education of students with exceptionalities (i.e.; setting IEP goals, placement decisions, etc.).	C	c	r	c
I feel prepared to communicate and collaborate with special education personnel in my future classroom,	¢	r	r	r
fee prepared to address the educational needs of students with exceptionalities in my future classroom,	c	c	c	c
I feel prepared to utilize appropriate materials to meet the diverse learning abilities of students in my future classroom.	¢	¢	r	r
I feel prepared to develop and use informal assessment procedures for	c	c	c	c

Perceptions of Pre	eservice Music	Educators Co	oncerning the	ir Ability to
students with exceptionalities in my future classroom,				
I feel prepared to monitor the progress of students with exceptionalities in my future classroom,	r	c	e	¢
I feel prepared to identify areas of difficulty for students with exceptionalities in my future classroom,	Ø.)	c	c	c
I feel prepared to modify instruction to accommodate students with exceptionalities in my future classroom.	C.	c	r	r
I feel prepared to adapt instructional materials to provide for individual differences in my future classroom,	c	c	C	c
I feel prepared to evaluate the effectiveness of my instruction and music program goals for students with exceptionalities in my future classroom.	¢.	C	с	r
I feel prepared to modify the physical environment of my future classroom to accommodate students with exceptionalities,	Ċ.	c	c	c
I feel prepared to effectively address classroom	r	r	c	r

management issues involving students with exceptionalities in my future classroom,				
I feel prepared to address social interactions among all students in my future classroom.	e	c	c	c

Perceptions of Preservice Music Educators Concerning their Ability to

Educational Experience

The following pages address the educational experiences you have had as an undergraduate student related to teaching students with exceptionalities. Each page represents ONE experience, and each experience should relate to a specific course. Experiences can include, but are not limited to: field experiences, lectures, readings, and discussions. Only include educational experiences you feel have impacted your ability to educate students with exceptionalities.Please do not include student teaching in this section.

An opportunity will be provided at the end of this section to discuss additional educational experiences that may not be attached to a specific course. A definition of terms will be provided at the top of each page for clarification,

Perceptions of Preservice Music Educators Concerning their Ability to

Educational Experience #1

Definition of Terms:

integrated or Mainstreamed Classroom: a classroom setting where students with exceptionalities are educated with their typically developing peers, with additional instructional support provided by the teacher or a paraprofessional.

Self-contained Classroom: a classroom setting comprised solely of students with exceptionalities.

Title of Course:

Course Category (select the response that best applies)

- C Special Education Course
- Child Development Course
- C Introduction to Education Course
- C Introduction to Music Education Course
- C Elementary/General Music Methods Course
- C Vocal Music Methods Course
- C Instrumental Music Methods Course
- C Music Therapy Course
- C Other (please specify)

Which school/college/department offered this course?

- ^C Music Education
- Music Therapy
- General Education
- Other (please specify)

Were you required, or did you elect, to enrol in this course?

- I was required to enroll in this course.
- C I elected to enroll in this course.

Select (he responses that best describes your field experiences in this course (select all ly):
The	was no field experience requirement for this course.
D Obs	rve instruction in integrated and/or mainstreamed classroom settings.
C Obs	rve instruction in self-contained classroom settings.
Prov	de instructional support (i.e.; one-on-one assistance to students) in integrated and/or mainstreamed n sattings.
Prov	de instructional support (i.e.; one-on-one assistance to students) in self-contained classroom settings,
Prov settings.	de instruction (i.e.; teach a lesson, warm-up, or activity) in integrated and/or mainstreamed classroom
Prov	de instruction (i.e.; teach a lesson, warm-up, or activity) in self-contained classroom settings.
C Othe	(please specify)
been pr underst	ovided with, and any other information you feel was helpful in deepening your anding of working with students with exceptionalities.
been pr underst	anding of working with students with exceptionalities.
been pr underst Add and	anding of working with students with exceptionalities.
Add and	anding of working with students with exceptionalities.
Add and C Yes C No	ovided with, and any other information you feel was helpful in deepening your anding of working with students with exceptionalities.
Add and C Yes C No	wided with, and any other information you feel was helpful in deepening your anding of working with students with exceptionalities.
Add and C Yes C No	wided with, and any other information you feel was helpful in deepening your anding of working with students with exceptionalities.
Add and C Yes C No	wided with, and any other information you feel was helpful in deepening your anding of working with students with exceptionalities.
Add and C Yes C No	wided with, and any other information you fee] was helpful in deepening your anding of working with students with exceptionalities.
Add and C Yes C No	wided with, and any other information you feel was helpful in deepening your anding of working with students with exceptionalities.
Add and C Yes C No	wided with, and any other information you feel was helpful in deepening your anding of working with students with exceptionalities.
Add and C Yes C No	ther Educational Experience?
Add and C Yes C No	wided with, and any other information you feel was helpful in deepening your anding of working with students with exceptionalities.
Add and C Yes C No	wided with, and any other information you feel was helpful in deepening your anding of working with students with exceptionalities.

Perceptions of Preservice Music Educators Concerning their Ability to

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Educational Experiences - Additional Experiences

Please provide any additional information on your educational experiences pertaining to the education of students with exceptionalities (i.e.; required volunteer work at community organizations, ensemble experiences, etc...)

Appendix B

Faculty Letter

February 26, 2015 Ashley G. Moss 4904 Belle Chase Blvd #09-108 Lansing, Michigan 48910

Dear Music Education Faculty Member,

My name is Ashley Moss, and I am a Masters student at Michigan State University. I am contacting you today to seek participation from the student teachers at your institution in the data collection process for my thesis. I am investigating the perceptions of preservice teachers concerning their preparation to teach students with exceptionalities. The participation of the student teachers at your institution is important because they have completed the requisite coursework to prepare them for success in the classroom and are therefore best positioned to reflect upon the entirety of their undergraduate educational experiences.

A copy of the survey tool has been included for your review, as well as a letter for the student teachers at your institution containing a live link to the survey tool. I would greatly appreciate it if you would consider sharing the attached letter with your student teachers. Please reply to this e-mail with the current number of students enrolled in student teaching at your institution to ensure an accurate representation of the research sample, should you elect to share this opportunity with your students.

The responses of the student teachers at your institution are invaluable to this study, and I thank you for sharing this opportunity with them.

Respectfully,

Ashley G. Moss

Appenedix C

Student Letter

Ashley G. Moss 4904 Belle Chase Blvd. #09-108 Lansing, Michigan 48910

Dear Student Teacher,

For my M.M. thesis, I am examining the perceptions of pre-service music educators from Big 10 universities concerning their preparation to teach students with exceptionalities. The enclosed survey is being sent to you as part of the data collection process. The results of this research study will be used to inform future research in the preparation of undergraduate students to teach students with exceptionalities.

Your participation in this study is important because of your recent experiences in university classrooms. Participation is voluntary. Your experiences as undergraduate students can help inform areas that music education programs and future researchers should consider when examining the preparation of future music educators. The survey will take approximately 15 minutes to complete.

Please find a link to the survey tool below. It is important that the survey be completed by Sunday, April 5th so that the next phase of the study can begin. I am looking forward to your perspectives concerning your preparation to teach students with exceptionalities. Your responses will remain confidential and will be used only for the purposes of this study. By completing and returning this study, you indicate your agreement to participate in this study.

<u>Click here</u> to go to the survey tool or copy and paste the link below into your browser.

https://www.surveymonkey.com/s/89KHWTR

Your perspectives are invaluable to this study, and I thank you in advance for your participation.

Respectfully,

Ashley G. Moss Graduate Assistant Michigan State University '15 M.M. Music Education mossash1@msu.edu Cynthia Taggart 209 Music Practice Bldg MSU East Lansing, MI 48824 taggartc@msu.edu or 517-432-9678 REFERENCES

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