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Preparing Music Teachers to Teach Students with Special Needs

By Ryan Hourigan

Assistant professor of music education at Ball State University in Muncie, Indiana. E-mail: rmhourigan@bsu.edu

The number of students needing assistance I from public school programs for children with disabilities has increased in recent years. This is due to many factors, including childhood illnesses, injuries, low birth weight, and the growing ability of service providers to identify children with special needs (Pamuk, Makuc, Heck, Rueben, & Lochner, 1998). The growing population of students with special needs, coupled with changes in legislation since 1975 (e.g., Education for All Handicapped Children Act of 1975; Americans with Disabilities Act of 1990; Individuals with Disabilities Education Act Amendments of 1997: Individuals with Disabilities Education Improvement Act of 2004) has had a major impact on the education of students with special needs.

Birkenshaw-Fleming (1993) states: "In recent years, music teachers in the school system have seen increasing numbers of students who have various mental and physical disabilities in their classrooms, and private music teachers are being approached by special-needs students who wish to study music" (p. v). Music teachers are under increasing demand to include students with disabilities in music classrooms.

The legislation mentioned above, along with several amendments to this legislation, has influenced educators and administrators to move students with special needs toward full inclusion (Colwell & Thompson, 2000). Colwell and Thompson state: "This requires

that music educators be prepared to accept and work with students with disabilities regardless of type or severity" (p. 206). However, many preservice music teachers have had limited contact with special needs students. Because of this limited contact, some preservice music educators have been unable to resolve their preconceived attitudes about children with special needs (Kaiser & Johnson, 2000). Upon entering the field, in-service music educators often find themselves unsupported and inadequately prepared within the special education system (Wilson & McCrary, 1996).

Preparation for inclusion must begin with preservice education. In a recent text on teacher education, Banks et al. (2005) state: "The goal must be to design programs that make attention to diversity, equity, and social justice centrally important so that all courses and field experiences for prospective teachers are conducted with these important goals in mind" (p. 274). There is a staggering absence of special needs preparation in preservice music education. In addition, there is little research into the effects of special needs experiences for preservice teachers in music education.

The purpose of this paper is to: (a) review research regarding existing preservice special education preparation in music education; (b) review research regarding preservice special education preparation in general education; and (c) discuss research dealing with successful field experience that includes students with

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special needs in music education. This paper will also include suggestions for research and teaching practice.

Preservice Special Education Preparation in Music Education

To understand the special needs preparation of music teachers, we must look at the offerings both in the music methods classroom and in the university at large. Heller (1994) surveyed music methods instructors at 103 colleges across five states to examine university offerings for music education students in special education. The purpose of this study was: (a) to ascertain the training and experiences addressing mainstreamed/special needs students that current music education methods instructors received in their respective undergraduate programs; (b) to determine how university music education programs are preparing their students to work with mainstreamed/special needs learners; (c) to discover whether current music teacher education faculty plan to implement program changes in the future; and (d) to recommend areas for future research directed toward curricula for prospective teachers (p. 9).

Heller implemented a descriptive research design to answer the research questions. He developed a questionnaire to survey colleges and universities concerning their demographic and enrollment information as well as teaching experience of the methods instructors. A large portion of the respondents indicated that they had at least two years of teaching experience. Many of the respondents had at least six years of experience. This survey was administered to a select sample of full-time methods instructors at 103 universities in Illinois, Indiana, Michigan, Ohio, and Wisconsin. All participants were methods instructors at schools affiliated with the National Association of Schools of Music (NASM).

The majority of the questions presented on Heller's 52-question survey were related to

the research questions mentioned above. Questions 15 through 23 asked about the type of mainstreaming experience methods instructors had encountered during their time as public or private school music teachers. Questions 24 through 26 inquired about training each respondent had received as an undergraduate. The rest of the survey posed questions about the type of mainstreaming training music majors now receive in their programs. Typical questions were: "Do any of your courses for undergraduate music education music majors contain topics that address the education of mainstreamed/special needs students?" and "Please list the names of your undergraduate courses for music education majors in which you address the education of mainstreamed/ special needs students" (Heller, 1994, p. 94).

The results of Heller's survey revealed that a small portion of the methods instructors (26.9%) in this survey received training in special education. Of the methods instructors who received training, many of them (64.4%) reported that their training was less than adequate, and approximately half (55%) reported that their training did not continue while they were teaching. The most important finding of this study was that professors who had prior personal experiences with mainstreaming were more likely to include mainstreaming topics in their methods classes. Heller was disappointed to find that only 15% of the respondents required field-based observation or clinical experiences with mainstreamed students.

The statistics provided by colleges and universities showed that only 40% of those surveyed have internal requirements for preparing preservice music teachers for mainstreaming. Seventy percent of the programs surveyed require students to enroll in courses provided outside the music department. Larger colleges and universities were more likely to have internal training for preservice music education students. Illinois led the region in offering internal departmental requirements in special education, whereas most programs in

Ohio did not. In addition, having a music therapy program did not influence special needs requirements for music education students.

Colwell and Thompson (2000) surveyed 171 universities to examine special education offerings for undergraduate music education majors. Specifically, Colwell and Thompson were interested in: (a) existence of a course in special education for music education majors; (b) the department through which this course was offered (and whether the content was music-specific); (c) required or elective status for graduation; (d) course title and credit hours; and (e) reference to mainstreaming in music methods course descriptions. The first three of the categories were analyzed according to the category of school (state-funded or private), whether or not a music therapy program existed at the university, and in which MENC division the university was located.

Results indicated that 74% of schools had a course in special education available. Of the schools that had a course available, 86% required at least one course for undergraduate music education majors. The researchers were surprised that more than a quarter of the schools examined did not offer a required or elective course in special education. Colwell and Thompson state: "There was often a course within the education department but with no room for music education majors to fit it into their curriculum sequence either as a required or elective course unless they choose an overload" (p. 210).

Results also indicated a total of 140 courses offered, with 30 of these courses being music-content-specific. Only 43% of the music-content-specific courses were required. The schools that offered a music therapy program were more likely to offer a music-content-specific special education course. Colwell and Thompson state: "This is perhaps due to the department philosophy toward the area of music therapy or incorporating music with individuals with disabilities" (p. 211).

Only 13 schools offered both a nonmusic-content- and music-content-specific course.

The researchers were surprised by the lack of special education offerings for music majors. Colwell and Thompson attributed this to five possibilities: (a) university requirements (no room in curriculum); (b) college of education or certificate demands; (c) universities adding general education requirements to an already-overcrowded undergraduate curriculum; (d) availability of personnel to teach the course; and (e) NASM constraints (p. 215).

The research mentioned above underscores the importance of an individual's experience with special needs students. Both of the above-mentioned studies suggest that music methods teachers who experienced teaching mainstreamed students are more likely to cover special needs topics in their classes.

Preservice Special Education Preparation in General Education

Our colleagues in the general education realm have been proactive in this area of research. The Handbook of Research on Teacher Education (Sikula, 1996) offers an extensive view of the current in special education, including preservice special needs preparation. York and Reynolds (1996) open their chapter by presenting theories and controversies behind the current inclusion model, followed by some of the problems that have resulted. They continue by offering an extensive review of the literature about teaching students in inclusive settings. This review of the research is organized according to strategies for general educators, strategies for special educators, and strategies for educators regardless of role. York and Reynolds follow up the review with an examination of related research on teacher education and students with disabilities, focusing on preparation of general educators and special educators.

York and Reynolds conclude that general education and special education should not

remain separate. Also, they agree with other research indicating that teacher education does not provide adequate training in special education. The authors suggest merging general and special education offerings in teacher education. This would improve the overall preparedness of future teachers in the area of special education. York and Reynolds offer a detailed model of the implications of these scenarios to show the linkages among researchers, professional organizations, and schools.

Following their model in music education would be difficult. However, this research was chosen to point out that other disciplines are beginning to look at special education as an integrated subject. General education methods instructors are moving away from the idea that special needs issues should be taught as a separate entity within the special education department outside the methods class. More and more, special education is being incorporated into the regular vernacular of methods classes. Even though it is difficult, music teacher educators should try to create partnerships with the special education community to achieve the same goal. Having a special educator or music therapist as a consultant would help music education professors provide adequate preparation for future music educators.

Pugach (2005) surveyed much of the existing research in general preservice preparation for teachers of students with special needs. The scope of her review was to look at the changing landscape of special education since 1990. Pugach states:

No longer are we simply talking about moving students with disabilities into general education classrooms under the practice of mainstreaming, as was the case during the 1970s. Instead, today the expectation is that most students with disabilities will attend general classrooms as much as is appropriate and that while they are there, they will learn the general education curriculum. (p. 550)

Pugach presents research that supports pedagogical practices used in preservice preparation for students with disabilities. These practices include: (a) reconfiguring coursework in conjunction with student teaching; (b) including special education as a topic in regular methods classes; and (c) using the case method to discuss potential special needs issues within future classrooms.

It is safe to say that music education programs have a variety of configurations of coursework, fieldwork, and student teaching. From the research cited above (Colwell & Thompson, 2000; Heller, 1994), there are many ways music methods teachers have attempted to incorporate special needs topics into individual methods classes. In addition, the case method has been an established tool for use in the methods class (Hourigan, 2006). However, the case method has not been suggested in the music education literature as a way to assist preservice teachers in preparing to teach learners with special needs. The case method is just one more tool we could develop as music teacher educators to encourage discussion and strategies for teaching music to students with special needs.

A large body of current teacher education research is presented in Preparing Teachers for a Changing World (Darling-Hammond & Bransford, 2005). Designed as a resource for teacher educators, curriculum designers, and administrators, this text is the culmination of work by the Committee on Teacher Education (CTE), a division of the National Academy of Education. The goal is to outline core concepts and strategies to improve teacher education and prepare teachers for an ever-changing field. The text presents a broad overview of emerging research on teacher learning and teacher education that suggests strategies for teacher education reform. This book is intended for those who are responsible for teacher preparation—university deans and faculty as well as district personnel and school-based faculty in cooperating schools or alternative programs.

Within Preparing Teachers for a Changing World, the chapter titled "Enhancing the Development of Students' Language(s)" (Valdez, Bunch, Snow, Lee, & Matos, 2005) suggests the need for all teachers to focus on language. Since the enrollment of English as a Second Language (ESL) students is increasing, teachers should have a deep understanding of the function of their own language and the language function of their students. This chapter depicts the practices and development of literacy and how it relates to language that is valued at school. Valdez et al. explain why teachers must understand how these practices relate to each other in order to successfully teach diverse learners, including those from other cultures who are entering our schools. These challenges are presented as research-based case examples of language challenges in the classroom.

In addition, Valdez et al. provide strategies for teachers who are faced with these issues in the classroom. Today's music teachers must be aware of strategies in teaching diverse learners. With the numbers of English language learners on the rise, a linguistics course in tandem with a traditional non-Western or world music course would be a positive addition to preservice music education.

In the same book, the chapter titled "Teaching Diverse Learners" (Banks et al., 2005) informs teachers and teacher educators about the changing demographics of our school population. The authors note that aspects of diversity among learners include culture, racial and ethnic origins, language, economic status, and learning challenges associated with exceptionalities. This chapter opens with research-based cases that show challenges in teaching diverse learners as well as the need to enhance all students' academic achievement. The goal of this chapter is to offer culturally responsive learner-adaptive pedagogy, curriculum, and assessment in tandem with knowledge about culture and its influences on learning. The chapter's strength

is its emphasis on learning about oneself as a part of this process, allowing teacher educators to highlight potential biases and beliefs and prepare preservice educators to teach in an increasingly diverse school population. The hope is that teacher educators will create culturally responsive teachers.

The two chapters reviewed above provide research-based cases to stimulate discussion and provide possible strategies for including students with special needs as a topic in methods classes. These cases could easily be used in the music methods classroom as well.

Positive Preservice Field Experiences and Interactions in Music Education

Kaiser and Johnson (2000) used a pretestposttest design to investigate the perceptions of music majors working with deaf students. Twenty-three music education and performance majors who were part of a brass ensemble were asked to complete a questionnaire based on how prepared, comfortable, and willing they were to work with deaf students. Participants were asked whether or not music could be used in the education of deaf students. This questionnaire was administered prior to a one-hour interactive concert the brass ensemble students gave for elementary school deaf students as part of an ongoing collaborative project between a large school of music and a deaf and hard-of-hearing program.

The music majors performed a one-hour interactive concert that included individual as well as group performances. In addition, they provided descriptions of the music and the instruments being played. The elementary school children were allowed to feel and play the brass instruments as well as feel the instruments while the college students played them. The children were allowed to sit on the wooden stage holding balloons to help amplify the vibrations of the concert. Kaiser and Johnson state: "These experiences provided social, musical, and educational interactions between

the music majors and the deaf children" (p. 226). Nine individuals including teachers, aides, an interpreter, and the researchers were available during the entire performance to assist and provide the optimum learning experience for both the deaf students and the music majors.

At the conclusion of the interactive experience, each performer was asked to complete a posttest questionnaire that replicated the pretest with the exception of the following open-response question: "Please make general comments regarding your feelings about to-day's experience" (p. 227). The researcher also gathered demographic information about previous experience with deaf students, which two of the participants indicated they had had.

Pretest scores indicated that the majority of the participants were willing and comfortable with the task of working with deaf students before this experience. Participants also indicated on the pretest that music could be used in the education of deaf students. However, the pretest showed that the majority of the participants did not feel prepared to work with deaf students. To study the effect of the interactive concert, pretest scores were compared with posttest scores in the areas of general perception, preparedness, comfort, and willingness. The mean scores increased in all four areas following the interactive concert. The open-response question indicated that the concert was a "terrific experience" (p. 228), and it also provided insight into the music majors' understanding of the importance of music in deaf students' education. One of the open question responses stated:

Thank you ... for introducing me to a whole new world. I had no doubts as to how an aural medium would affect these kids, but now I know the joy deaf and hard-of-hearing people can gain from music. (p. 229)

Kaiser and Johnson found that one field experience can change a music major's perspective on teaching students with special needs. The authors state: "It is interesting to note that this single interaction significantly increased the subjects' perception of the value of music for the deaf" (p. 230). In addition, they found that interactive experiences with students with disabilities might help eliminate apprehension in working with deaf students. In addition, Kaiser and Johnson found that without these experiences, music majors are less likely to understand the role that music can play in the education of students with disabilities.

VanWeelden and Whipple (2005) incorporated special needs field-based experience into a semester-long course, Teaching Secondary General Music. This study investigated music education students' (a) personal comfort interacting with persons with special needs; (b) perceptions of preparation in their educational training to work with students with special needs in music settings; (c) comfort working with students with special needs in music settings; (d) willingness to provide music for students with special needs; and (e) perceptions of behavior and learning of students with special needs (p. 63). Twenty-eight undergraduate music majors were placed in one of two middle school self-contained classrooms for students with special needs. Each classroom was supervised by one of the researchers.

Two secondary general music curricula—one for fall and one for spring—were created for each classroom by the researchers. Both curricula contained the same types of activities, including song leading, Orff instrumental orchestrations, world music, movement, Western art music, music listening, and musical games. The preservice music teachers spent the first week in the classes observing and acclimating themselves, and they also served as teaching assistants while the researchers taught each class.

The following weeks were designed to allow the participants to teach all aspects of the lessons in teaching groups. Two teaching groups were assigned to each classroom. The group that was not assigned to teach on a given day served as teaching aides for the class. Each group taught a total of four times during the semester.

Teaching assessments followed each lesson. All teachers from each classroom met with the supervisor to discuss their strengths and weaknesses. Individual teaching goals were established (slower speech, sequence adjustments) as were teaching group goals (better transitions and student engagement). Teachers met with the researchers weekly to discuss strategies for the following week. These sessions also included discussions about concerns and successes as they prepared for the next week.

Students were asked to complete a survey both at the beginning of this experience and at the end. This survey consisted of 17 questions regarding the preservice students' perceptions of music for secondary students with special needs, and it also included questions about how prepared, comfortable, and willing the participants were about teaching students with special needs. All questions used a five-point Likert-type scale ranging from "strongly disagree" to "strongly agree."

The researchers found that students' confidence in teaching students with special needs increased after this field experience. They state: "Being comfortable interacting with persons with disabilities is a major step toward positive attitudes about people with disabilities" (p. 67). In addition, as a result of this field experience, preservice students felt more comfortable and prepared to teach learners with special needs. VanWeelden and Whipple state: "Results indicated the field experience had a significantly positive effect in regard to students' comfort in inclusive music settings" (p. 67).

Others (Hawkins, 1991/1992; Colwell, 1998; Darrow, 1999; Johnson & Darrow, 1997) have conducted research to measure attitudes among music teachers and music

students toward students with special needs. Much of the negativity and anxiety felt by music teachers could be overcome with hands-on field experiences teaching learners with special needs in preservice teacher preparation. Research shows that the knowledge gained by this experience can directly affect attitudes of preservice and in-service music teachers.

Wilson and McCrary (1996) studied 18 music educators as they progressed through a seven-week summer course concentrating on teaching music to special learners. Of the 18 students, 13 had no previous special education training. The remaining participants had some workshop or in-service training through their school districts. Meeting three days a week for two hours, the course covered topics on various special needs and teaching techniques that may help in the classroom.

The purpose of the study was to examine whether this instruction had an effect on the attitudes of the in-service teachers enrolled in the class. The participants were given a survey instrument as a pretest at the first class meeting. This same survey was given as a posttest on the last day of class. The survey included statements describing students from five ranges of impairments (physical, multiple, mental, emotional, and none). Using a Likert-type scale ("strongly disagree" to "strongly agree"), the participants were asked to 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 Likert-type scales rated the above-mentioned descriptions from 1 ("strongly disagree") to 5 ("strongly agree").

The results of this study were mixed. The exposure to descriptions of children with special needs seemed to decrease participants' willingness and comfort in teaching exceptional children. However, the completion of the course seemed to help teachers feel more capable in teaching music to students with

special needs. Also, Wilson and McCrary explained that in discussion, teachers mentioned that they were often excluded from planning sessions regarding students placed in their class. Teachers felt as though they needed to be a part of the process. As a result of this class, teachers felt more capable participating in the planning process for students with special needs. The researchers also mentioned their concern that no real exposure to students with special needs was part of this course. Wilson and McCrary conclude: "Course work coupled with practical experience, therefore, may increase positive attitudes in music educators towards teaching specialneeds learners" (p. 31).

Recommendations for Teaching Practice

According to the literature, musiccontent-specific courses in special education within schools of music offer the best preparation for undergraduate music education majors (Colwell & Thompson, 2000). However, research indicates that such courses are rare and difficult to offer. College of education courses in special education are more prevalent but are not always required for certification. Methods teachers are often overwhelmed with the amount of content typically covered in a music methods class, and they struggle with including students with special needs as a topic. Methods teachers are often inexperienced themselves in teaching students with special needs and find it difficult to keep up with current trends in special education (Heller, 1994).

Providing time for this topic is indeed difficult. Including experiences with learners having special needs as part of fieldwork and observations, however, may be the key to helping music methods teachers prepare preservice music teachers to include students with special needs in their classrooms (Kaiser & Johnson, 2000; VanWeelden & Whipple,

2005). Research suggests that music methods instructors with special education experience are more likely to include students with special needs as a topic in their methods classes (Heller, 1994). Research also suggests that creating a relationship with the special education community is vital to all disciplines, including music (York & Reynolds, 1996). Fieldwork in the special education classroom could help music methods teachers stay current with changing trends and feel more comfortable with inclusion as a topic in the music methods classes. In addition, methods teachers could build relationships with special educators and music therapists in their community for consultation on this topic.

Research suggests that preclinical observations that include hands-on experience teaching students with special needs, such as serving as aides or paraprofessionals during interactions, will enhance the fieldwork experience for both the preservice music teacher and the special learner (Heller, 1994; Johnson & Darrow, 1997; VanWeelden & Whipple, 2005). The more experience music teachers have interacting with learners with special needs, the more comfortable they will feel teaching students with special needs (Heller, 1994; VanWeelden & Whipple, 2005; York & Reynolds, 1996). In addition, a few high-quality field experiences that include learners with special needs can drastically change a preservice music teacher's perspective about teaching learners with special needs (Kaiser & Johnson, 2000).

When time is limited and including field-work with students with special needs is not an option, the case method could be a useful tool in stimulating discussion and planning strategies for teaching students with disabilities (Pugach, 2005). Cases, such as the examples used in Valdez et al. (2005) and Banks et al. (2005), could easily be adapted for use in music methods classes. Having students respond to such cases in discussion, including writing their own cases, could help preservice students deal with their own dispositions about teaching students with disabilities.

Research suggests that increasing numbers of English language learners are entering our classrooms (Valdez et al., 2005). Music educators must understand that ESL learners are one of the populations of students with special needs. This research presented by Valdez et al. along with articles, such as Abril (2003), could serve as basis for discussion in a music methods course as well as with student teachers in a seminar setting. In addition, research, such as the work of Banks et al. (2005), could help methods teachers prepare future music teachers to understand and adapt pedagogy, curriculum, and assessment to our changing populations.

Recommendations for Research

Research indicates that observations and hands-on exposure to positive inclusion environments directly affect confidence of music teachers in teaching students with special needs (Colwell & Thompson, 2000; Heller, 1994; Johnson & Darrow, 1997; VanWeelden & Whipple, 2000; York & Reynolds, 1996). More research needs to be done in order to understand longitudinal implications of special needs fieldwork within the music methods class. In addition, further research is needed into the curricular implications of internal special education coursework (within a music department) compared to special education coursework outside the school of music (Colwell & Thompson, 2000; Heller, 1994; York & Reynolds, 1996). This suggested research will strengthen our existing teacher education programs and provide a solid background in special learner preparation for preservice music educators.

Research suggests the importance of establishing relationships within the special education community (York & Reynolds, 1996). Much of the reviewed research was coupled with the large body of research in music therapy. Further research into partnerships with special educators, including relationships with music therapists, could provide support and

consultation models that could be used in music teacher education. Colwell and Thompson (2000) state:

Music therapists can provide an excellent service to these educators as they are trained specifically to work with individuals with disabilities. Music therapists can function as team teachers or consultants. They can provide resources to adapt instruments and/or activities suitable for successful inclusion of all students as well as demonstrate positive models of accepting attitudes. (p. 206)

Since music therapy programs do not exist at all universities, music educators should strategize with their colleagues in special education about how best to prepare our future music teachers to teach music to students with disabilities and to make inclusion topics more commonplace within the music methods classroom. This will strengthen our students' confidence and ability to provide a music education to all students, including students with special needs.

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