ABSTRACT

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MARYLAND SCHOOL BAND AND ORCHESTRA

PROGRAMS

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The purpose of this study was to determine the status of inclusion in instrumental music programs in Maryland public schools and the attitudes of instrumental music teachers towards the inclusion of students with disabilities into their instrumental music programs. Participants (N = 214) completed an online survey which assessed the representation of disabilities in instrumental music classes, teacher preparation, inclusion practices and teacher attitudes. Data revealed poor representation of students with mental retardation in instrumental music classes, discrepancies in the implementation of inclusion, and conflicting teacher attitudes toward inclusion and specific disabilities. These data will be discussed in light of national statistics on inclusive education and the manner in which they might impact instrumental music programs.

THE STATUS OF INCLUSIVE EDUCATION IN MARYLAND SCHOOL BAND AND ORCHESTRA PROGRAMS

By

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I. Introduction

Since the adoption of special education legislation in the 1970s the population of students with disabilities has increased in American music classrooms. The mandate for free and appropriate education in the least restrictive environment made all components of the school program available to students with disabilities, including elective courses and extracurricular activities such as music (Adamek & Darrow, 2005). Initially, inclusive musical experiences for special learners were primarily in general music class. Participation in instrumental music ensembles has become gradually more popular as inclusion is more fully realized (Zdzinski, 2001).

Despite the framework for inclusive education stipulated by Public Law (P.L.) 94-142 in 1975, the process of implementation within instrumental music programs has been slow. The clarification of the law and its intentions through the amendments of 1986, 1990, 1997, and 2004 has enabled more students with disabilities to take advantage of instrumental music education, though often without the necessary supports cited by the law for appropriate inclusion practices (Frisque, Niebur, & Humphreys, 1994; Gfeller, Darrow, & Hedden, 1990; Gilbert & Asmus, 1981; Humpal & Dimmick, 1995). Inclusion in an instrumental ensemble requires making individualized accommodations to instruction, adapting music, and selecting instruments according to the students' abilities and disabilities (Zdzinski, 2001). This is difficult to accomplish without administrative support, collaboration with special educators, or music teacher involvement in the inclusion process, as is often the case. There is an additional concern for instrumental music educators to maintain the performance level of their ensemble (Wilson & McCrary, 1996), a pressure associated with festivals and competitions.

It is no surprise that music teachers' attitudes towards inclusion tend to be negative or ambivalent given the complexity of inclusive practices (Gfeller, 1992).

Compounded with reports of music educators feeling unprepared to adapt their teaching to meet the needs of special learners (Atterbury, 1986; Frisque et al., 1994; Gfeller et al., 1990; Gilbert & Asmus, 1981), inclusion has the potential to incite concern and resentment in instrumental music teachers. As inclusion becomes the norm in American public schools, it is imperative to understand how inclusion impacts instrumental music educators and their attitudes towards its implementation to ensure optimal instrumental music experiences for students with disabilities.

What is Inclusion?

Inclusion has been frequently misunderstood since first introduced by P.L. 94-142 in 1975 (Damer, 2001). The philosophical basis and the intended definition of inclusive education have eluded many in the field over the past 30 years. Unlike earlier special education models in which educators focused on addressing students' inabilities, inclusion is based on the philosophy of educating the whole student (Adamek & Darrow, 2005). Inclusion is defined as educating students with disabilities in the least restrictive environment (which is the general education classroom for most students) with all of the necessary supports and services each student needs for an equitable education (Halvorsen & Neary, 2001; Johnson & Darrow, 1997). This kind of educational system requires holistic student evaluation followed by individualized planning and instruction (Adamek & Darrow, 2005).

The four basic principles of inclusion: (a) human potential, (b) general system theory, (c) normalization, and (d) self-determination, promote a method of education

individualized to the student's needs (Adamek & Darrow, 2005). The principle of human potential recognizes the desire of all people, including individuals with disabilities, to develop in a positive manner. The general system theory describes the comprehensive student evaluation used for developing an individualized education that is as close to 'normal' as possible (ie: the principle of normalization). The concept of self-determination enables students with disabilities and their families to gain the necessary skills to advocate for sustained inclusive opportunities (Adamek & Darrow, 2005).

Although often used interchangeably, some in the field of special education classify inclusion, integration, and mainstreaming differently (Halvorsen & Neary, 2001). Integration refers to including students with disabilities into general education situations for the sole purpose of socialization. Integrated students are regular members of a self-contained class, but visit the general education for socialization opportunities. Mainstreaming is similar in that the student is primarily educated in a self-contained classroom and participates in general education classes when they have demonstrated the ability to do so. Both are still used frequently in American public schools, yet neither integration nor mainstreaming fully satisfy the requirement of educating students with disabilities according to the inclusive policies of P.L. 94-142 such as least restrictive environment (Halvorsen & Neary, 2001).

Inclusion in Music

Historically, the majority of inclusive music experiences can be categorized as integration or mainstreaming. After the implementation of P.L. 94-142 in the late 1970s students with disabilities began to be placed in music classes to satisfy the least restrictive environment requirement of the law (Damer, 2001). Many administrators and special

educators believed that age-level skills were not necessary for basic music participation and that placing students with disabilities into music classes would alleviate the need to include these students in academic courses that might require considerable adaptation.

Unfortunately, music educators, who were not trained to work with special learners, faced the difficult challenge of accommodating this new population of students into their classes, along with their general education peers. Initially, these placements were primarily in general music situations where it was assumed that facilitating inclusion for students with varying degrees of disabilities would be easiest. As familiarity with specific disabilities and adaptive strategies has improved throughout all fields of education, the inclusion of special learners has expanded into vocal and instrumental music classes, thus accommodating the ever-increasing population of students with disabilities included in American public schools.

A number of issues arose from the policy of including students with disabilities into music classes that continue to trouble music educators. The placement of students with disabilities into music classes is often a problem when the music educator is not consulted about the most appropriate placement. Music educators have expressed concern about the lack of information provided regarding included students, lack of planning time to develop appropriate instruction, inadequate administrative support, difficulty managing their classrooms with such diverse populations, and feelings of being unprepared or unqualified to work with special learners (Adamek & Darrow, 2005). One alternative to the different versions of inclusive music education is a self-contained music class, though this type of class has also been identified among concerns raised by music educators who

do not feel prepared to teach whole groups of students with varying disabilities (Adamek & Darrow, 2005).

Amendments to P.L. 94-142 in 1990 changed the law to the Individuals with Disabilities Education Act (IDEA), expanding the types of disabilities served under the law (Adamek & Darrow, 2005). This caused an increase of more than 30% in the number of students with disabilities receiving educational services from 1991 to 2001 (Adamek & Darrow, 2005), in addition to increases in diagnoses. In the 2001-2002 school year students with disabilities from ages 6 through 21 constituted approximately 9% of all students in America. This growing population of students with special needs poses real challenges for the music educators serving them in the classroom. School systems have had to make substantial organizational changes to appropriately include students with disabilities into their educational framework.

Inclusion in Maryland Public Schools

School systems in Maryland appear to represent the struggles faced by districts around the country concerning appropriate systems of inclusive education. The Maryland Developmental Disabilities Council, The Arc of Maryland, Inc., Maryland Coalition for Inclusive Education, Maryland Disability Law Center, and Mid-Atlantic Chapter of TASH [from this point on referenced as MDDC] prepared the document, *Inclusive Education in Maryland: A Blueprint for Change* (2003) to report the status of inclusion in Maryland schools and prescribe a plan for its improvement. The report explains that Maryland was one of the first states in the nation to pass legislation requiring educational services for students with disabilities in 1973. This initiated the creation of separate

schools and programs of education for students with disabilities, setting a standard for special education practice in the state.

It appears that Maryland school systems have not adequately revised their initial efforts to offer students with disabilities educational opportunities in accordance with the evolution of inclusive education practices in this country. Consequently, the result is that Maryland schools are some of the most segregated in the nation due to their continued instruction of students with disabilities in self-contained situations (MDDC, 2003). In 2003 Maryland ranked fourth highest out of the 50 states, Puerto Rico, and the District of Columbia in educating students with disabilities in segregated settings. Regarding the placement of special learners in self-contained classrooms and private or public separate schools, Maryland ranked consistently within the top ten for students with autism, mental retardation, and multiple disabilities (MDDC, 2003).

Segregation also exists in Maryland according to types of disabilities and according to the county school district in which the students are educated, with no consistency across the state regarding segregation. For example, while 60% of students with autism are educated primarily in general education classes in Worcester County schools, there are no students with autism included in general education in Garrett or Kent County schools. However, 22.22% of students with multiple disabilities are included in general education classes in Kent County schools (MDDC, 2003).

The document, *Inclusive Education in Maryland* (MDDC, 2003) discusses the barriers to providing effective inclusive education in the state of Maryland. Leadership at the state and local levels is deficient. There are no state standards or policies for inclusion, thus there is no pressure on school districts or school principals to develop

inclusive programs. The lack of accountability trickling down from the state level has resulted in meeting the minimal least restrictive environment goals as set forth by the U.S. Department of Education. Most teachers in Maryland have not received the training necessary to work with special learners in general education settings. The majority of general education majors in Maryland teacher preparation programs are only required to take a three-credit survey course on disabilities, which is insufficient for adapting instruction to meet the needs of included students. Public special education programs are generally inadequately funded in Maryland because so much money is diverted to the 6.5% of the special education population being educated in private, segregated schools. Within the public schools the process for developing Individualized Education Programs (IEP) is often not executed according to federal legislation. Additionally, IEP teams frequently do not consider the full extent of least restrictive environments for students and base services on category of disability as opposed to the individual student's needs. The opinions of the parents of special learners sometimes interfere with the implementation of inclusive education, as many have become accustomed to segregated settings and believe that their children are better served in that environment. Finally, the collection and accuracy of data on special education services are inconsistent across the state and often flawed, impeding the ability to assess and improve upon the current system.

Summary

Data indicate that the population of special learners continues to grow in

American music classrooms. This is particularly true for instrumental music classes due
to the developments in inclusion advocacy and practice in recent years. However, it is

unclear whether this trend is occurring in instrumental music classes in the state of Maryland, as the data reveals that many of the state's special learners continue to be educated in segregated settings. It is likely that this segregation excludes them from instrumental music opportunities and affects teacher attitudes toward inclusion and students with disabilities. Since inclusion is becoming the standard structure for special education around the country, it is imperative to assess the status of inclusion in instrumental music programs in a state that is not fully implementing inclusive practices. *Purpose of the Study*

The purpose of this study is to determine the current state of inclusion in instrumental music programs in the state of Maryland. Additionally, this study will examine the attitudes of Maryland's instrumental music teachers towards the practice of inclusion. The following research questions were investigated for the purpose of this study:

- 1. What disabilities are represented by instrumental music students in Maryland public schools?
- 2. What inclusion strategies are employed for students with disabilities in instrumental music classes in Maryland public schools?
- 3. What is the frequency of involvement of instrumental music teachers in the processes and implementation of inclusion in Maryland public schools?
- 4. What are the types and amounts of special education training received by Maryland public school instrumental music teachers?
- 5. What are instrumental music teachers' attitudes towards inclusion?

6. What is the relationship between teachers' special education training and their attitudes towards inclusion?

The researcher hypothesizes that the results of this study will be reflective of the segregated state of inclusion in Maryland schools as described in the 2003 report, *Inclusive Education in Maryland* (MDDC, 2003).

II. Review of Related Literature

The passage of Public Law 94-142 in 1975 was the impetus for the surge in the number of studies regarding the special learner in the music classroom. For the purposes of this study, research studies specifically dealing with the inclusion of students with disabilities into general education and music programs were reviewed. The search for literature was conducted using multiple online databases through the library website of the University of Maryland, College Park, including Academic Search Premier, ERIC, Education Abstracts, Humanities Abstracts, Primary Search, PsycInfo, RILM Abstracts of Music Literature, and Teacher Reference Center. Descriptors that were used during the search include inclusion, mainstreaming, teacher education, teacher preparation, disabilities, music education, students with disabilities, attitudes, and special learners. A search through journals and related texts was also conducted, including *Bulletin of the* Council for Research in Music Education, Journal of Research in Music Education, Update: Applications of Research in Music Education, Music Educators Journal, Handbook of Research on Music Teaching and Learning, The New Handbook of Research on Music Teaching and Learning, and Music in Special Education. References are used that were published after the 1975 passage of P.L. 94-142.

In the review of literature five main topics continuously emerged as being most critical to the understanding and implementation of inclusion in the public school setting. The five topics that will be included in this review are: (1) the status of inclusion in general education classes and public school music programs; (2) teacher attributes necessary for effective inclusion; (3) teacher preparation for working with special

learners; (4) teacher attitudes towards inclusion; and (5) practices of inclusion, including instructional support and adaptation.

The Status of Inclusion

The status of inclusion in general education and music classes has been of considerable interest to researchers trying to understand the evolution of inclusion in the United States and its impact on general education and music teachers. Numerous surveys have been administered in the past 25 years to help determine the status of inclusion in various regions around the nation. An early survey that evaluated the national status of inclusion in music programs (Gilbert & Asmus, 1981) examined the involvement of music educators with special learners, their familiarity with special education legislation, and issues regarding instruction in mainstreamed music classes. From a national sample of music educators (n = 789), it was found that 62.9% had worked with special learners and 71% were familiar with P.L. 94-142. The majority of these were general music and elementary level teachers. Little involvement in IEP development for vocal and instrumental teachers was reported, though 97.2% of general music teachers had participated in IEP development. A majority of respondents indicated a desire for more information on inclusive music education practices, which was sharply contrasted by the low percentage (less than 20%) of music educators currently using these practices in their teaching. The study revealed a major discrepancy between music educators' involvement with special learners and their "perceived need for information" (Gilbert & Asmus, 1981, p. 36) on how to best serve students with disabilities in the music classroom.

Atterbury (1986/1987) surveyed elementary music specialists (n = 133) in the MENC Southern Division concerning topics similar to those used in the Gilbert and

Asmus (1981) survey. Results showed that 5.3% of the teachers' average student population consisted of students who were mainstreamed. Though the data indicated that the majority of teachers felt that special learners were moderately successful to very successful in mainstreamed music classes, inadequate administrative support and moderate to low levels of instructional assistance were reported. The majority of respondents had never been included in IEP development (84%), did not have teacher aides assisting during inclusion classes (87%), and indicated no additional planning time for included students (90%). A lack of adapted materials and sufficient budget to allow for adaptations were also indicated by the majority of the sample (56% and 82% respectively).

In a survey of elementary and secondary music educators in Iowa and Kansas Gfeller, Darrow, and Hedden (1990) examined music educator involvement with special learners, teacher preparation, mainstreaming practices, and perceived effectiveness of mainstreaming. Yielding a response rate of 76% of Iowa music teachers and 70% of Kansas music teachers, the study found that 41.5% of music educators in Iowa and 58.5% of music educators in Kansas were involved in mainstreaming students with disabilities. The data from the two states were pooled together for analysis of level of teacher preparation, mainstreaming practices, and perceived effectiveness of mainstreaming. The majority of respondents (53%) indicated that they had received little, if any, formal training on special education issues and practices. Another 25% of respondents indicated their preparation consisted of one college course, though primarily on the topic of child psychology instead of exceptionalities and specific adaptive strategies. Like the Gilbert and Asmus (1981) and Atterbury (1986) surveys, this survey also found that music

educators were not receiving the instructional support called for in P.L. 94-142, nor were the majority of students with disabilities being mainstreamed into music classes according to the principles of least restrictive environment. There was no consensus among music educators from Iowa and Kansas regarding the perceived effectiveness of mainstreaming in the music classroom.

A similar survey of Arizona music educators was conducted four years later by Frisque, Niebur, and Humphreys (1994) to evaluate the "nature and extent of mainstreaming in Arizona's music classrooms" (p. 96), mainstreaming practices, and perceived success of mainstreaming. The survey questionnaire was developed by the authors and revised to align with the questionnaire created by Gfeller et al. (1990) to allow for comparison of data. The study found that more than 94% of the sample population (n = 107) had worked with special learners, with 84% currently teaching a mainstreamed class. The majority of the sample population not involved with inclusion was secondary instrumental music teachers with fewer than five years of teaching experience. Students with learning disabilities and emotional disorders were found to be the most common groups served in the inclusive music class. Ninety percent of the respondents indicated that they were the only teachers responsible for the music education of students with disabilities in their schools. In accordance with previous surveys, results showed little teacher preparation (41% of the sample with no special education training), a lack of resources and planning time, limited participation in placement decisions, and a failure to consistently meet least restrictive environment protocol. While 67% of respondents felt that students with disabilities were not being effectively mainstreamed into music classes, the majority (62%) of responding teachers

did feel successful teaching special learners. The authors believe this discrepancy to be indicative of teachers' complaints that mainstreaming practices in their schools do not align with the principles of P.L. 94-142 and its amendments.

Using an adaptation of the questionnaire of Frisque et al. (1994), Atterbury (1998) surveyed a sample of Maine music educators (n = 117). Atterbury examined the same topics as those addressed in the Gfeller et al. (1990) and Frisque et al. (1994) surveys and then compared her findings to the previous surveys' results. All respondents, representing one-fifth of the music educators in Maine, had worked with special learners at some point in their careers. Additionally, 53% of respondents indicated that all special learners in their school were included into music classes, and another 28% indicated that some special learners were mainstreamed into music. Like the Frisque et al. (1994) study, students with learning disabilities and students with emotional disorders were found to be the two largest groups of students served in the inclusive music class (95% and 75% of the population, respectively). Unlike the previous studies, a minority (8%) of Maine music educators had no formal training. Atterbury suggests that this is due to a 1988 state mandate requiring special education training for teaching certification. Similar to previous findings, the results did corroborate with the previous studies regarding mainstreaming practices, perceived effectiveness of mainstreaming, and placement decisions.

A survey by Soodak, Podell, and Lehman (1998) of 188 general educators in the New York metropolitan area reported that only 35.6% of the respondents had students with disabilities included in their classes at the time of the survey. This low percentage of included students in general education classes may have been influenced by regional

differences or the survey's direction to indicate the current population of special learners in general education classes. Nonetheless, there is a disparity between the concentrations of special learners in general education and music classes according to the surveys reviewed. The higher concentration of students with disabilities in music classes may reflect the proclivity to satisfy least restrictive environment legislation by placing special learners in the music classroom.

According to the five surveys of music mainstreaming discussed above, there has been significant growth in the number of students with disabilities included into music classes over a span of less than twenty years (Atterbury, 1986/1987/1998; Frisque et al., 1994; Gilbert & Asmus, 1981; Gfeller et al., 1990). The sharp rise in the percentage of included students after 1990 may be attributed to the revision of P.L. 94-142. In 1990 the law was changed to the Individuals with Disabilities Education Act (IDEA), clarifying the definition of inclusion and the objective of least restrictive environment, as well as expanding the disabilities served under the law. The differences in concentration of included students can also be attributed to regional differences. Though the national percentage of teachers who worked with special learners in 1981 (Gilbert & Asmus) was at 62.9%, the subsequent regional studies revealed inconsistencies. While approximately half of those sampled in Iowa and Kansas had worked with special learners (Gfeller et al., 1990), the Arizona and Maine samples found close to or 100% working with special learners (Atterbury, 1998; Frisque et al., 1994). These disparities illustrate the irregularity of special education policy around the nation.

Teacher Attributes Necessary for Effective Inclusion

As schools begin to implement inclusive education, those systems of inclusion and their educators deemed effective have become models for development and preparation. Olson, Chalmers, and Hoover (1997) sought to identify the attitudes and attributes of effective inclusion teachers. To do so, they interviewed ten general educators nominated by their school principal and special educator as "most proficient at classroom accommodation of students with disabilities" (Olson et al., 1997, ¶ 11). Five common characteristics emerged from the interviews as indicators of effective inclusion teachers:

(a) interpersonal skills of tolerance, reflectivity, and flexibility; (b) a sense of responsibility for all students in the classroom; (c) positive collaborative relationship with special educators; (d) ability to appropriately adjust expectations; and (e) a nurturing and approachable demeanor. Two concerns expressed by the interviewees were regarding the administration (e.g. insufficient planning time given and unequal proportions of special learners among teachers) and the individualization of inclusion to be appropriate for each student.

Hammel (2001b) conducted a similar study of music educators to determine the essential teacher competencies for working with special learners in elementary classrooms. The author surveyed elementary music teachers (n = 202) and college/university faculty teaching undergraduate music education methods courses (n = 30), conducted interviews with three elementary music teachers considered "exceptional" by their music supervisors, observed the instruction of eight special learners over a period of eight music classes, and analyzed the syllabi of fifteen music education/music therapy courses that cover music and inclusion practices. From this

substantial data collection, Hammel was able to determine fourteen teacher competencies deemed essential to teaching special learners in the music classroom. The fourteen competencies were organized into the categories of general knowledge, legal aspects, assessment and evaluation, curriculum planning, classroom structure, classroom management, methods and materials, and communication skills. Although personality characteristics were not considered in the study, Hammel identified specific competencies that align with characteristics of effective inclusion teachers identified in Olson et al. (1997). Those competencies include the individualization and accommodation of instruction and materials, communication with support personnel and special education colleagues, and the ability to facilitate the social environment of the inclusion class.

Other factors that have consistently been associated with successful inclusion practices include administrative support and collaboration with special educators (Atterbury, 1998; Soodak et al., 1998). Also identified is the teacher characteristic of high personal self-efficacy, which enables teachers to feel "more willing to take responsibility for meeting needs of students with learning problems in their classes" instead of referring them out of the classroom for special services (Soodak et al., 1998, p. 482).

Teacher Preparation

Methods of preparing teachers to work with special learners in the inclusive music classroom have become a popular topic in music education (Gfeller, 1992). Research shows that even a short portion of a college course on exceptional learners has the potential to improve preservice music educators' ability to adapt instruction according to student disabilities (Gfeller, 1992). Many do associate more teacher preparation with

increased inclusion success, though this body of research tends to be inconsistent in results and method. The findings do reveal that, in general, teachers often feel underprepared to work with special learners and desire more information on effective inclusion strategies (Daane, Beirne-Smith, & Latham, 2000; Darrow, 1999; Gilbert & Asmus, 1981; Hammel, 2001a/2001b; Wilson & McCrary, 1996).

Lack of undergraduate training and in-service opportunities is apparent in much of the literature. As noted in the surveys discussed above approximately 40% of the sample populations had no formal training (Frisque et al., 1994; Gfeller et al., 1990). More than 70% of respondents in the national survey of Gilbert and Asmus (1981) indicated that more information would be helpful on 11 items of inclusive music education practice. A smaller study in which 54 elementary music educators from Kansas were surveyed on attitudes toward inclusion also found teacher preparation to be insufficient, with the average undergraduate students receiving only three college credits of instruction (Sideridis & Chandler, 1995).

Insufficient teacher preparation can be attributed to the absence of special education training requirements at the undergraduate level or for certification purposes. In 1984, 33 state education departments had no special education requirements for certification or required only one course on exceptionalities for general educators (Ganschow, Weber, & Davis, 1984). By 1990 40 states required one course on exceptionalities for general education majors, though the majority of those classes did not include a field experience component (Fender & Fiedler, 1990). The increase in state requirements for general educators suggests an awareness of the growing population of students with disabilities placed in general education programs during the 1980s. The

improvement can be seen in the results of Atterbury's (1998) survey of Maine music educators, in which only 8% of the population had no formal training due to the state certification requirements.

A national survey of undergraduate music education programs was conducted to determine the availability of special education courses for preservice music educators (Colwell & Thompson, 2000). Of the 171 colleges and universities surveyed, 127 (74%) offered at least one special education course, though only 109 of those schools required the course for a degree. The researchers also found that the majority of courses available to music education majors were not content specific, but generic special education survey courses. Though the availability of special education opportunities is encouraging for the field of music education, the research still revealed a deficiency of content specific training in which music educators could learn the necessary skills for adapting music instruction, materials, and strategies for the special learner.

Special education training for preservice music educators also tends to lack a field experience component (Darrow, 1999; VanWeelden & Whipple, 2005). A study to determine the importance of field experience with special learners was conducted during an undergraduate music education methods course (VanWeelden & Whipple, 2005). Twenty-eight undergraduates completed field experience for a secondary general music course in two self-contained classes: one with students with emotional and/or behavior disorders and one with students with cognitive delays. Using a pretest-posttest experiment, the researchers found that the preservice music educators felt more prepared and more comfortable working with students with disabilities in the classroom, in music

ensembles, and in private studio instruction then they had before the field experience began.

A study (Hammel, 2001a) of elementary music teachers in the state of Virginia (n = 202) on undergraduate preparation found that most teachers spent more time discussing disabilities in undergraduate classes than observing or teaching special learners with those disabilities during preservice field experience. Hammel did find that teachers with only a few years of teaching experience had more discussion of special learners in their undergraduate courses and had more observation and teaching experiences, indicating that preservice preparation has increased concurrently with the increase in population of special learners in Virginia's schools. Participants in this study also called for more undergraduate training on inclusion and field experience with special learners to benefit new teachers entering the profession.

It would appear that the field experience component is important in influencing preservice music educators' comfort level in working with special learners. A study by Wilson and McCrary (1996) revealed that after a seven-week summer course on music for special learners, a sample (n = 18) of graduate music education students felt less comfortable and willing, albeit more capable, of working with students with disabilities in the music classroom. The small sample sizes of both the Wilson and McCrary and VanWeelden and Whipple studies make it difficult to generalize the findings. However, the results must still be considered when evaluating the necessity for preservice instruction on the inclusion of special learners and the content of that coursework.

Teacher Attitude

Research repeatedly asserts that teacher attitude is a vital indicator of inclusion success (Colwell & Thompson, 2000; Olson et al., 1997; Sideridis & Chandler, 1995; Soodak et al., 1998). Inclusion is a controversial subject, eliciting arguments about the morality of offering equitable educational opportunities to all students and the disadvantages of mixing students with substantial needs alongside their non-disabled peers (Johnson & Darrow, 1997). These disadvantages may become reality in the classroom, causing negative attitudes and anxiety in music educators. Factors that influence the attitudes of teachers toward inclusion include preparation, specific types of disabilities, previous experience with inclusion, and school environment.

Multiple studies have linked teacher preparation with teacher attitude. Teachers in the Hammel (2001a) survey communicated "feelings of inadequacy when faced with special learners" (p. 8) and concerns about classroom management with included students, which they attributed to insufficient preparation. As described above, Wilson and McCrary (1996) determined that although teacher preparation increased music educators' feelings of capability, it made them feel less comfortable and less willing to work with special learners in music classes. Sixteen of the eighteen participants indicated having previous experiences with special learners, which may have influenced negative feelings towards inclusion. Additionally, the lack of field experiences, in which the sample members might have had the opportunity to engage with special learners in a positive model of inclusion, could also have influenced the feelings of decreased comfort and willingness to work in an inclusion situation.

A study by Shade and Stewart (2001) found that a survey course on special education improved the attitudes of undergraduate general education and special education majors. Using a pretest-posttest survey of attitudinal statements, the results showed a significant positive change in the attitudes of general education majors regarding behavior, self-concept, other students, teachers, and parents. For the special education majors, a positive attitudinal change was noticed regarding class placement, behavior, self-concept, motivation, and parents.

An attitudinal survey was conducted of elementary general educators and special educators, as well as their administrators from a Southeastern school district who had been implementing inclusion for 2 years without inservice training on inclusion or collaboration skills (Daane et al., 2000). Although inclusive practices, such as combined IEP planning and collaboration between general and special education were occurring, all participants indicated a discomfort due to lack of communication and planning time to appropriately implement these practices. All three groups also noted that the general educators were not prepared with the necessary strategies and accommodations to meet the needs of the special learners in their classes. Special educators linked the lack of teacher preparedness to low confidence levels in general educators, contributing to attitudes of ambivalence toward inclusion. The added stress of ineffective collaboration situations, increased workload, and classroom management difficulties were also likely contributors to the general educators' attitudes.

Disability types also impact teacher attitudes toward inclusion. Studies consistently find that teachers consider students with emotional or behavioral disorders most difficult to work with (Darrow, 1999; Frisque et al., 1994; Gfeller et al., 1990;

Kostka, 1999; Sideridis & Chandler, 1995; Soodak et al., 1998; Wilson & McCrary, 1996). Students with mental retardation (Sideridis & Chandler, 1995; Soodak et al., 1998) and multiple disabilities (Sideridis & Chandler, 1995; Wilson & McCrary, 1996) were also frequently cited as difficult to teach in an inclusion class. Soodak et al. (1998) concluded that general education teachers thought it easier to include students with disabilities that were social or physical as opposed to students with disabilities that were academic in nature. It was also noted that the severity of a disability adversely affects a teachers' willingness to work with that student, due to the music educators' perceived demands on instruction and classroom management (Sideridis & Chandler, 1995; Soodak et al., 1998).

The recurrence of ambivalent attitudes towards inclusion can be seen throughout the literature. In the surveys of Atterbury (1998), Daane et al. (2000), Frisque et al. (1994), and Gfeller et al. (1990) teachers displayed inconsistent attitudes toward including students with disabilities in general education classes. Although teachers believed that it was the right of students with disabilities to participate in general education, they felt that "effective instruction" could not be provided for those students in the general education class (Daane et al., 2000, ¶ 20). The survey of music teachers in Iowa and Kansas (Gfeller et al., 1990) found that although 52% of respondents felt the needs of students with disabilities were being met in the mainstreamed music classroom, 50% of the sample also believed that students with disabilities would be better served in a self-contained classroom. Frisque et al. (1994) found that 62% of their sample felt successful teaching special learners, but only 33% of the sample felt that students with disabilities were being effectively integrated into music classes. Likewise, the Atterbury

(1998) survey found that 66% of teachers felt successful teaching special learners; though only 45% of teachers felt they were being effectively integrated. These data point towards poor implementation of inclusion despite teachers' perceived attitudes of successful teaching. It is likely that the lack of administrative and instructional support, insufficient collaboration, and inappropriate student placements also identified by teachers in these studies contributed to teachers' feelings that included students were not being served best in music classrooms.

Also worth noting is that 61% of the respondents in the Gfeller et al. (1990) survey felt that students with disabilities inhibit the progress of general education students in mainstreamed classes. Findings by Wilson and McCrary (1996) conveyed similar attitudes, with teachers expressing their reluctance to allow students with disabilities to participate in performance ensembles in fear that they would lower the performance standard of the ensemble.

Inclusion Practices

The manner in which inclusion is implemented can be pivotal to its success. The realization of inclusive education involves appropriately placing students with disabilities into general education classes, familiarity with special education legislation, collaboration between special educators and general educators, and administrative and instructional support. These issues have caused the most difficulty in the inclusive music classroom.

The placement of students with disabilities in the music classroom has been an issue of much contention since the term "least restrictive environment" was coined in 1975. Administrators have repeatedly placed students with disabilities into music

education classes under the philosophy that any student can listen to music, oblivious to the reading, writing, creating, and performance components of a typical music class (Darrow, 1999) and most often due to "scheduling convenience" (Atterbury, 1986, p. 202). Placing a special learner into an unsuitable inclusive environment does not fulfill the objective of least restrictive environment and will generally result in a poor musical experience for the student and his/her peers. Inappropriate placements also cause frustration for the music educator who must modify instruction and expectations for a vast diversity of learners.

Music teachers rarely participate in the placement process, which often creates inappropriate musical opportunities for students with disabilities. In the four surveys of music educators conducted between 1981 and 1998 the percentages of teachers who rarely or never participated in placement decisions was reported as being between 72% and 79% (Atterbury, 1998, Frisque et al., 1994; Gfeller et al., 1990; Gilbert & Asmus, 1981). The startlingly high percentage of teachers not involved in the placements of students with disabilities into appropriate inclusive music education classes has remained static and continues to be an issue.

Familiarity with the special education laws that guide inclusive practices is an important component of inclusion practice. The results of Gilbert and Asmus (1981) and Atterbury (1986) indicated that music educators were moderately to strongly familiar with P.L. 94-142. However, despite their familiarity with the law, music educators were not participating in the inclusive process according to the mandates of the law. Federal legislation states: "A regular education teacher of the child, as a member of the IEP Team, shall, to the extent appropriate, participate in the development of the IEP of the

child..." (Individuals with Disabilities Education Improvement Act of 2004). Yet, Gilbert and Asmus (1981) found that 76% of the sample had never participated in the development of an IEP, corroborated by the more than 80% of respondents not included in IEP planning in the Atterbury (1986) and Gfeller et al. (1990) studies. Survey results also indicated that teachers were receiving little of the instructional support called for in special education legislation, such as additional planning time and personal aides for students (Atterbury, 1986; Gfeller et al., 1990).

Many music educators have identified lack of administrative support as another reason for concern in inclusion situations (Olson et al., 1997; Wilson & McCrary, 1996). Administrative support is often a strong indicator of perceived inclusion success (Atterbury, 1998; Gfeller et al., 1990; Soodak et al., 1998). It is the responsibility of the school administration to involve the music educator in placement decisions and IEP development, recognize the music class as an academic area of instruction that involves more than just listening to music, and provide collaboration opportunities to facilitate the inclusion process.

Collaboration with special educators during the inclusion process has also been an indicator of inclusion success (Daane et al., 2000; Olson et al., 1997). A positive correlation (r = .40) was found between teachers' perceived success of the inclusion process and the amount of instructional support they received (Gfeller et al., 1990). Music educators identified the need for collaboration with special educators and specialists (i.e. physical therapists, speech/language pathologists) as the most critical issue regarding the inclusion of students with severe disabilities into the music classroom (Darrow, 1999). Soodak et al. (1998) found that collaboration opportunities made

teachers more receptive to inclusion because it helped to "compensate for teachers' personal insecurities" (p. 493).

Discussion

The review of literature finds that although the number of included students is increasing in music classrooms, the practices have remained somewhat static. Inadequate administrative support, disorganized collaboration with special educators and service providers, unadvised placements decisions, and omission from the IEP development process continue to hamper the progress of inclusive music education. Special education training for music educators is being offered more frequently throughout undergraduate programs in the U.S., though there continues to be an absence of adaptive strategies that can be directly applied to the music classroom and field experience with special learners. Despite this increase in training opportunities, music teacher attitudes towards inclusion continue to be conflicting, affecting quality of instruction.

It is necessary to understand the manner in which the issues presented in the review of literature continue to impact music educators in this country. The surveys of Atterbury (1986/1998), Frisque et al. (1994), Gfeller et al. (1990), and Gilbert & Asmus (1981) provided significant data regarding the status of inclusion in regions around the nation over a seventeen year period. These surveys will be the model for the current study, which will evaluate the status of inclusion in Maryland's instrumental music programs.

III. Method

Sample

The sample selected for the current study consists of instrumental music (band and orchestra) teachers in the state of Maryland. This inclusive group of educators was chosen as a population sample. The current sampling method is modeled after the studies of Gfeller, Darrow, and Hedden (1990); Frisque, Niebur, and Humphreys (1994); and Atterbury (1998), which all used representative samples of music educators from wholestate populations.

Music area contacts for each of the 24 county-wide school districts and one city school system in the state of Maryland were contacted by email in September 2006 to request their assistance in reaching the instrumental music teachers in their county for the study. In the email request (Appendix A), music area contacts were asked if they would be willing and able to forward the email invitation for survey participation to the instrumental music teachers in their school districts. Music area contacts in thirteen of the 24 school districts agreed to participate by forwarding invitations to teachers, while five agreed to do so after receiving school board approval. Four school districts elected not to participate in the study. Three music area contacts provided email addresses for their instrumental music teachers. No music area contacts could be reached for the four remaining school districts, so teachers' email addresses were found on those school districts' websites. A total of 717 instrumental music educators from 20 Maryland county school districts were contacted for participation in the survey. After the first email invitation, six emails were returned due to incorrect email addresses, eliciting a final sample of 711 instrumental music educators.

At the conclusion of the data collection it was found that responses had been collected from two music educators not included in the original sample. It can be assumed that these individuals received the email link with access to the survey through a forwarded email from another music educator who was invited to participate in the study. While this does not compromise the data collected, it does not permit the researcher to determine exactly how many music educators received the invitation email to participate in the study because it is possible that it was shared without authorization. Response rate will be calculated according to the original sample number.

A total of 309 (43.5%) music educators responded to the survey. Two of those responses were eliminated due to their affiliation with school districts not involved in the study and three individuals chose not to participate. In addition, 90 other responses were deemed unusable for data consideration because they were left incomplete (n = 50), indicated their primary teaching area as something other than band or strings (n = 37) or did not answer any questions beyond the statement of consent (n = 3). Within the first 24 hours of data collection it was also brought to the researcher's attention that individuals indicating they teach a combination of band and strings were not being permitted to complete the questionnaire due to the logic-tool applied to the web-based survey. This protocol prevented respondents from completing the survey if they did not indicate their primary teaching area as band or strings. The logic-tool was altered on February 10, 2007 to allow all individuals indicating "Other" as their primary teaching area to complete the questionnaire, though only those indicating a combination of band and strings were included in the usable responses. The total usable responses numbered 214, eliciting an overall usable response rate of 30.1%.

Survey Development

A 13-question, researcher-designed questionnaire was adapted from the survey, *Perceived Effectiveness of Mainstreaming in Iowa and Kansas Schools* (Gfeller et al., 1990) and titled, "The Status of Inclusion in Instrumental Music Programs in the State of Maryland." Gfeller et al. (1990) measured the reliability of their survey questionnaire using the Cronbach Alpha. Reliability was reported for the entire questionnaire and three subscales of questions as follows: Total questionnaire minus demographic information (Items 6-37) equals .76; Music objectives (Items 17-22) equals .42; Instructional support (Items 6-16, 24) equals .56; and Perceived success of mainstreaming (Items 25-28) equals .79 (p. 94).

The survey (Appendix B) is composed of 13 questions organized into five sections of inquiry: demographics, experience with special learners, teacher training, inclusion practices, and teacher attitude. Demographic information obtained from this survey included area of teaching specialty (i.e. band or orchestra), years of teaching experience, county school district of employment, and primary age group of instruction. To determine experience with special learners, questions were used to ascertain the approximate number of students that teachers have worked with according to the specific disabilities served under IDEA. Also of interest were the types of inclusion situations in which participants have taught (i.e. mainstreaming, integration, or inclusion) as defined in the survey. A six-point Likert-type scale was used to determine the amount of teacher training according to eight different topics related to special education. The frequency of in-service training offered by the school was measured on a continuous scale, while

scale. In the section on inclusion practices, a six-point Likert-type scale of frequency was used to measure placement procedures, instructional support, and the types of goals addressed for special learners in the instrumental music classroom. The final section on teacher attitude evaluated the participants' perceived success of inclusion practices and the perceived degree of difficulty working with the specific disabilities served under IDEA with a six-point Likert-type scale of agreement.

A number of changes were made to the survey instrument obtained from the Gfeller et al. (1990) study to update the language used and adapt to the needs of the current study. Language was changed to align with the people-first philosophy used in the IDEA legislation. This included replacing the term, 'handicapped' with 'disabilities' and using terminology such as students with autism, as opposed to autistic students. Because the Gfeller et al. (1990) study was conducted prior to the 1990 revisions to P.L. 94-142, items on the survey that addressed specific disabilities were expanded to include all disabilities served under current IDEA legislation. Additional demographic information was added for analysis of the data according to the county school district in which the teachers are employed. One question was added to the survey for the purpose of understanding the status of inclusion, which asks whether students are primarily mainstreamed, integrated, or included into instrumental music classes. Another question was added to determine the extent of teachers' familiarity with special education legislation and terminology, including IDEA, IEPs, least restrictive environment, and 504 plans.

The survey was administered through an online survey tool, SurveyMonkey (www.surveymonkey.com). This method was selected over a paper survey as web-based

surveys elicit greater responses, take less time than mail surveys, are more cost-efficient, and are easily accessible due to the popularity and widespread use of the Internet (Alreck & Settle, 2004). The format used with the web-based SurveyMonkey includes drop-down menus of choices and the ability to consolidate similar questions into groups to minimize verbiage. The features of SurveyMonkey also allowed for the use of conditional logic to require answers and manage respondents' answers according to the desired sample. SurveyMonkey includes an analysis feature that provides descriptive statistics for the entire survey and offers the ability to analyze subsets of the data. It was also possible to preview data for individual respondents and to download all data to data processing software.

After the initial adaptations of the survey by the author, a link to the online survey was sent by email to two music education professors and three music education graduate students who were asked to review the survey and make comments. Changes were made to the survey according to the readers' recommendations. These included adding page numbers for participants to reference the number of questions remaining and clarification of language. Grammatical errors were corrected on questions three, four, and eight. The choice, "instrumental" was eliminated from question two and a directive was added for participants to answer all questions according to the predominant teaching area selected in this question. Making this distinction would allow the researcher to later analyze the data according to subject area. Question fourteen was changed to a positive statement of feelings to elicit more direct expressions of teacher attitude.

Pilot Study

A pilot study was administered to obtain feedback on the survey instrument. An email request (Appendix C) was sent to the String Instructional Specialist in a large school district located in the metropolitan Washington, DC area, but not in Maryland. The contact agreed to forward the email invitation for the pilot study to the 99 string and 126 band teachers in the school system. An email invitation (Appendix D) was sent on Monday, November 20, 2006, inviting all band and string teachers to participate in the survey by Friday, December 1, 2006. Seventy-five band and string teachers participated in the survey, of which 58 (25.7%) were usable. Responses were deemed unusable if the participant did not complete all survey questions or if they indicated that their primary area of instruction was something other than band or orchestra.

Pilot study data were used to determine the reliability of the survey instrument using Cronbach's alpha. Reliability results were reported for the six subscales of questions as follows: Approximate number of included students (Item 6) equals .86; Type of inclusion setting (Item 7) equals .024; Teacher preparation (Item 9) equals .86; Familiarity with special education legislation (Item 11) equals .78; Teacher attitude toward school situation (Item 13) equals .352; and Teacher attitude toward specific disability (Item 14) equals .81.

Additional changes were made to the survey instrument based on responses of the pilot study. The definition of inclusion in question seven was modified to include more specific details. Question 12 from the pilot survey was moved to the third section, becoming question eight, to be included with other questions regarding types of inclusion experiences and was edited for clarification. The categories of education preparation in

question nine were expanded to six by adding the option for "portion of a college course," from the Frisque et al. (1994) survey. Both questions 13 and 14 were changed from five-point Likert-type scales to six-point Likert-type scales of agreement due to the number of neutral responses elicited from the pilot study. The statement of feeling in question 14 was changed to "I would feel comfortable" to eliminate the "no experience" response.

Final revisions were made to the survey questionnaire after review by college faculty. The statement of confidentiality was made more explicit to explain that data analysis would not be conducted on individual responses, though would be conducted according to school level and school district. Question six regarding teacher preparation was amended to include all past experiences with special learners in instrumental music ensembles. A question (10) was added to determine the extent of field experience with special learners in participants' teacher education programs. The phrase, "special education laws" was replaced in question twelve with "special education terms" since not all items measured were actual legislation. In question fourteen, regarding teacher attitudes toward inclusion, the item "I feel that the needs of students with special needs are better met in special education music classes" was divided into two separate items to determine whether instrumental music teachers believed special learners' needs were better met in self-contained music classes or inclusive general music classes instead of instrumental music ensembles.

Dependent and Independent Variables

The dependent variables examined during this study were instrumental music teachers' experiences working with special learners and their attitudes towards the

inclusion of students with disabilities into instrumental music classes. Instrumental teachers' experience with special learners was measured in section three of the survey instrument with questions regarding the approximate number of students with specific disabilities that the teachers have worked with in the instrumental music class, the approximate number of students mainstreamed, integrated, or included into the instrumental music class, and the type of music opportunities available to special learners in teachers' schools. Teacher attitudes towards inclusion were measured in section six with an agreement scale for five statements regarding perceived effectiveness of inclusion practices and with an agreement scale regarding teachers' comfort level working with specific disabilities.

The independent variables evaluated for effect are the area of teaching specialty (i.e. band or strings), county school district of employment, number of years of teaching experience, student age group, and amount and type of teacher preparation.

Procedures

The survey was administered from February 8, 2007 through March 2, 2007. Email invitations (Appendices E and F) were sent to eighteen music supervisors or lead teachers and to the individual teachers of the seven school districts whose email addresses were previously obtained. A hyperlink to the survey was included in the email, allowing teachers to access the survey directly from the email invitation. A second email invitation was sent during the second week on February 15, 2007 (Appendices G and H) and a final email invitation was sent at the start of the last week on Monday, February 26, 2007. Once the survey closed, all data were downloaded to an Excel spreadsheet and then converted for analysis using SPSS 15.0.

IV. Results

The data were analyzed using the graduate version of SPSS 15.0 software. Frequencies were determined first for all questionnaire items. An α level of .05 was set for each test.

Demographic Analysis

Data were analyzed to determine the frequencies for predominant teaching area, teaching level, years of teaching experience, and county of employment (see Table 1). The analysis of demographic data found that the majority of respondents primarily teach band. The majority of respondents indicated that they teach at the elementary level. Respondents indicated an average of 12.72 (SD = 9.52) years of teaching experience.

Table 1
Demographic Data on Respondents (N=214)

Classifications	n	0/0
Area of Teaching:		
Band	144	67.3
Strings	38	17.8
Band & Strings combined	32	15.0
Teaching Level:		
Elementary School	102	47.7
Middle School	35	30.4
High School	31	14.5
Elementary/Middle	6	2.8
Elementary/High	5	2.3
Middle/High	3	1.4
Elementary/Middle/High	2	0.9
Years of Teaching Experience:		
1-5	68	31.8
6-10	38	17.8
11-15	36	16.8
16-20	23	10.7
21-25	14	6.5
More than 25	35	16.4

Data were also collected regarding respondents' county of employment and analyzed for response rate (see Table 2). Due to the inequalities in response rates from individual counties further analysis was not conducted regarding this area.

Table 2
Percentage of Respondents According to County of Employment

		Total	Percentage of	Percentage of
Classification	Sample Size	Respondents	County Sample	Study Sample
County of Employmen	ıt:			
Allegany	14	2	14.3	0.9
Anne Arundel	90	26	28.9	12.1
Baltimore County	147	62	42.2	29.0
Calvert	22	9	40.9	4.2
Caroline	8	2	25.0	0.9
Carroll	36	5	13.9	2.3
Cecil	17	10	58.8	4.7
Dorchester	11	1	9.1	0.5
Frederick	43	16	37.2	7.5
Garrett	10	1	10.0	0.5
Howard	92	26	28.3	12.1
Kent	5	1	20.0	0.5
Prince George's	104	23	22.1	10.7
Queen Annes	12	1	8.3	0.5
St. Mary's	32	9	28.1	4.2
Somerset	3	2	66.7	0.9
Talbot	3	1	33.3	0.5
Washington	30	10	33.3	4.7
Wicomico	15	4	26.7	1.9
Worcester	23	3	13.0	1.4
Note. Counties that chos	se not to participate	e are not included in	the table.	

What disabilities are represented by instrumental music students in Maryland public schools?

The data were analyzed to determine the frequencies of specific disabilities being served in Maryland's instrumental music classrooms (see Table 3). The results indicated that the disability most often represented by students being served in the instrumental music classroom is specific learning disabilities (46.7%), while the disability least served in instrumental music classes is traumatic brain injury. The data show that most respondents worked with a few students in each disability classification.

Table 3
Frequency and Percentages of Students Included by Disability Classification

Classification	Percentage of Students Enrolled							
	No	one	Few	(1-5)	Severa	1 (6-12)	Many	(13+)
	n	%	n	%	n	%	n	%
Specific Learning Disabilities	8	3.7	57	26.6	49	22.9	100	46.7
Speech/Language Impairments	30	14.0	88	41.1	60	28.0	36	16.8
Serious Emotional Disturbance	50	23.4	92	43.0	41	19.2	31	14.5
Autism	56	26.2	110	51.4	40	18.7	8	3.7
Hearing Impairments	61	28.5	132	61.7	16	7.5	5	2.3
Other Health Impairments	73	34.1	90	42.1	31	14.5	20	9.3
Mental Retardation	101	47.2	81	37.9	14	6.5	18	8.4
Orthopedic Impairments	105	49.1	93	43.5	14	6.5	2	0.9
Severe Visual Impairments	111	51.9	93	43.5	7	3.3	3	1.4
Traumatic Brain Injury	170	79.4	41	19.2	2	0.9	1	0.5

What inclusion strategies are employed for students with disabilities in instrumental music classes in Maryland public schools?

A mean score was determined for the percentage of students with disabilities mainstreamed, integrated, or included into instrumental music classes (see Table 4).

Respondents indicated that the lowest percentage of students had been integrated into classes for socialization purposes, while "some" (11 to 50%) students were mainstreamed into instrumental music classes due to ability level. The majority of respondents indicated that "many" (more than 50%) students with disabilities had been included into their instrumental music classes according to the principles of least restrictive environment and IDEA that define inclusion.

Table 4
Method of Including Special Learners

Method Method	M	SD
Mainstreaming	2.21	1.20
Integration	1.77	0.88
Inclusion	3.42	1.29
Note. On a 5-point scale indicating	percentage of special learners inc	luded into
instrumental music ensembles when	$re \ 1=0\% \ and \ 5=100\%.$	

Instrumental music educators were also asked to indicate all other music instruction options for students with disabilities in addition to their inclusion in performing ensembles and general music classes (see Table 5). Very few respondents (5.6%) indicated the availability of music therapy options and 31.3% of respondents indicated that self-contained music classes taught by the music teacher were available. The majority of respondents (51.4%) indicated that no other music instruction options were available to students with disabilities in their schools other than inclusion into general music or instrumental music classes.

Table 5

Percentage of Respondents Indicating Availability of Alternative Music Instruction

Classification	N	%
Self-Contained Music Classes	67	31.3
Music Therapy	12	5.6
None	110	51.4

What is the frequency of involvement of instrumental music teachers in the processes and implementation of inclusion in Maryland public schools?

The extent of instrumental music teacher involvement in the process of inclusion and the manner in which music educators implement inclusion in their programs were analyzed for frequency of occurrence (see Table 6). No participation in the IEP development (63.6%) and student placement processes (57.9%) was most commonly reported by instrumental music teachers. Most respondents also indicated that they are occasionally or never given additional preparation time to plan for special learners and individualize instruction, nor are they receiving adequate resources to meet the needs of students with disabilities included into their classes.

The majority of instrumental music educators indicated that they focus their instruction on musical skills with special learners, though the data showed no clear

inclination for developing musical skills as the primary objective for special learners in instrumental music classes. Students with disabilities included into instrumental music classes were generally expected to participate equally, though it does appear that instrumental music teachers did not hold students with disabilities to the same standards as their normal achieving peers all the time.

Table 6
Percentage of Respondents' Frequency of Involvement in the Process and Implementation of Inclusion

Item	Never	Occasionally	Usually	Always
Teacher Involvement in Inclusion Process				
Extra preparation time to plan for included students	93.9	3.7	0.5	1.9
Write IEP goals for music	87.4	9.3	2.3	0.9
Participate in IEP programming	63.6	24.8	7.9	3.7
Participate in student placement process	57.9	27.6	8.9	5.6
Adequate time to individualize instruction	55.1	29.4	12.1	3.3
Adequate resources available	42.5	37.4	15.4	4.7
Adequate consultation with special educator	8.4	28.0	38.3	25.2
Expected to include all special learners	8.4	12.6	30.4	48.6
Instructional Practice				
Must work on non-musical goals for special learners	50.9	23.4	17.8	7.9
Special learners are graded on same standards as regular				
education peers	30.4	37.9	20.6	11.2
Expected to adapt regular music education goals for special				
learners	12.6	31.8	28.0	27.6
Expect equal participation of special learners as regular				
education peers	10.7	35.0	35.5	18.7
Primary objective for special learners in instrumental music is				
development of non-musical skills	8.4	39.7	31.8	20.1
Primary objective for special learners in instrumental music is				
development of musical skills	5.1	26.2	39.7	29.0
Other Factors				
Student placement based on musical achievement	54.2	21.5	16.8	7.5
Students with disabilities are accompanied by individual aides				
when appropriate	22.4	38.8	28.0	10.7

What are the types and amounts of special education training received by Maryland public school instrumental music teachers?

Participants reported little training in topics specifically dealing with special education and music for special learners (see Table 7). Few respondents received training

beyond a single college course in any of the special education topics classified for this study. The most training received by the respondents was in child psychology or child development, which does not expressly prepare teachers to work with students with disabilities.

Table 7
Percentages of Training in Special Education Topics

Topic	Amount of tra	aining				
	No education or inservice	Few hours of inservice	Portion of college course	College course	College course & additional inservice	Several college courses & ongoing inservice
Child psychology/development	3.7	6.1	15.9	42.1	21.0	11.2
Disability awareness	13.1	38.3	23.4	12.6	8.9	3.7
Special education legislation	16.8	26.2	22.0	22.0	8.9	4.2
Exceptional children	19.6	22.0	25.7	19.2	9.8	3.7
Adaptive strategies	19.6	36.9	23.4	10.3	5.6	4.2
Abnormal psychology	34.6	12.6	28.0	20.1	2.8	1.9
Special music education	34.6	17.8	21.0	15.0	8.4	3.3
Music for special populations	60.7	12.1	14.0	7.9	2.8	2.3

Previous research noted that preservice music education training often lacked a field experience component with special learners. This study found that more than 75% of instrumental music educators with one to five years of teaching experience participated in field experience with special learners during their undergraduate training; however, a comparatively low percentage of teachers with 21 or more years of teaching experience indicated having a field experience component with special learners in accordance with previous findings (see Table 8).

Table 8
Percentage of Respondents Indicating Preservice Field Experience with Special Learners

Years Teaching Experience	n	%
1-5	52	76.5
6-10	19	50.0
11-15	21	58.3
16-20	8	34.8
21-25	3	21.4
More than 25	9	25.7

The frequency of offerings for inservices and workshops on teaching special learners in the music classroom are reported in Table 9. Ongoing professional development was an infrequent occurrence for participants on topics regarding the instruction of students with disabilities in the music classroom. Twelve percent of respondents reported that their schools provided inservices or workshops once or twice each year, with the majority indicating that this kind of professional development is only offered at the request of the staff.

Table 9

Availability of Inservice		
Frequency of Inservice	N	%
Monthly	5	2.3
Once a semester	21	9.8
Once a school year	41	19.2
Upon request of staff	97	45.3
Not at all	50	23.4

An average score was calculated for familiarity with each of four special education terms (see Table 10). Despite the lack of training noted above, instrumental music teachers reported average to above-average familiarity with common special education terms. The data suggest that instrumental music educators are most familiar with Individualized Education Plans (IEPs), and least familiar with the federal legislation Individuals with Disabilities Education Act (IDEA) that mandates the use of IEPs.

Table 10
Average Familiarity with Special Education Terms

Item	Mean	SD	
IDEA	3.35	1.36	
IEP	4.43	0.85	
LRE	3.65	1.38	
504 Plan	3.84	1.37	
Note. On a 5-point scale where 1=Not at all familiar and 5=Very familiar.			

What are instrumental music teachers' attitudes towards inclusion?

The data collected from questions evaluating teacher attitudes towards inclusion were first analyzed for frequency according to predominant teaching area and years of teaching experience, but no significant difference was found. The data were analyzed to determine the mean attitude scores and standard deviations (see Table 11). Findings indicated that although instrumental music teachers "somewhat agree" that students with disabilities are being effectively included into the regular instrumental music ensembles, they indicated feeling more strongly that the music education needs of students with disabilities could be better met in self-contained music classes. Mean attitude scores were similar for statements regarding music education needs of special learners being met in the regular music class/ensemble or being better met in the general music classroom. It appears that although instrumental music educators feel students with disabilities are adequately included into their ensembles, they felt these students would be better served in a self-contained or general music classroom.

Table 11
Mean Attitude Scores of Respondents' Attitudes Towards Inclusion

Item	Mean	SD
Special learners hamper the progress of students without disabilities in regular music classes/ensembles.	3.48	1.51
Music education needs of special learners are being met in the regular music class/ensemble.	3.68	1.34
Music education needs of special learners are better met in general music classes.	3.68	1.42
Students with disabilities are effectively included into regular music classes/ensembles.	3.78	1.37
Music education needs of special learners are better met in self-contained music classes.	3.89	1.41
School administrator is sensitive to concerns regarding working with included students. Note. On a scale of 1-6 where 1=Strongly Disagree and 6 =Strongly Agree.	4.17	1.41

Mean attitude scores and standard deviations were determined for each of the disabilities served under IDEA legislation (see Table 12). Despite the moderate mean attitude score of comfort for the total sample population toward students with traumatic brain injury, 57.9% of the participants indicated some degree of discomfort working with this disability classification. Additionally, respondents indicated some degree of discomfort teaching students with mental retardation (52.3%) and serious emotional disturbance (50.9%). "Other health impairments" was the disability with which instrumental music educators felt most comfortable.

Table 12

Mean Attitude Scores of Respondents on Comfort Level Working with Specific Disabilities

Classification	Mean	SD
Traumatic Brain Injury	3.17	1.42
Mental Retardation	3.24	1.54
Serious Emotional Disturbance	3.32	1.51
Autism	4.00	1.42
Hearing Impairments	4.14	1.43
Severe Visual Impairments	4.32	1.29
Orthopedic Impairments	4.66	1.16
Specific Learning Disabilities	5.01	0.93
Speech/Language Impairments	5.01	1.00
Other Health Impairments	5.21	0.92
Note. On a scale of 1-6 where 1=Strongly Disagre	ee and 6 =Strongly Agree for the	e statement, "I

Note. On a scale of 1-6 where I=Strongly Disagree and 6 =Strongly Agree for the statement, "I would feel comfortable working with students with this disability in my instrumental music class."

What is the relationship between teachers' special education training and their attitudes towards inclusion?

Multiple independent groups t tests were performed comparing the mean attitude scores for field experience (n = 112) and no field experience groups (n = 102) for specific disabilities. The data (see Table 13) show statistically significant differences were found for specific learning disabilities, hearing impairments, autism, serious emotional disturbance, mental retardation, and traumatic brain injury, while statistically nonsignificant findings were found for attitudes towards students with speech/language impairments, visual impairments, orthopedic impairments, or other health problems. The data show more positive attitude scores toward all disabilities for individuals who reported having undergraduate field experience with special learners.

Table 13
Differences in Attitudes Toward Specific Disabilities Between Respondents with and without Field Experience

		No Field				
	Field Ex	Field Experience		rience		
	(n=1)	(n=102)				
Classification	M	SD	M	SD	t	
Other Health Impairments	5.25	0.88	5.16	0.96	0.74	
Speech/Language Impairments	5.07	0.92	4.95	1.08	0.88	
Orthopedic Impairments	4.78	1.09	4.54	1.23	1.5	
Severe Visual Impairments	4.45	1.27	4.18	1.3	1.53	
Specific Learning Disabilities	5.13	0.88	4.88	0.97	2.00*	
Hearing Impairments	4.36	1.32	3.9	1.51	2.35*	
Autism	4.26	1.3	3.73	1.5	2.78*	
Serious Emotional Disturbance	3.67	1.44	2.93	1.5	3.67*	
Mental Retardation	3.7	1.5	2.74	1.44	4.78*	
Traumatic Brain Injury	3.63	1.33	2.68	1.36	5.16*	

Multiple independent groups t tests were performed comparing the mean attitude scores toward inclusion for teachers who had training that included field experiences (n = 112) and those that did not (n = 102). The data (see Table 14) indicated a statistically significant difference between respondents with or without preservice field experience

with special learners only for the statement, "Music education needs of special learners are better met in general music classes." Those with field experience showed more positive attitudes than those that did not.

Table 14
Differences in Attitudes Towards Inclusion Between Respondents with and without Field Experience

	Field Experience		No Field Experience		
	(n=112)		(n=102)		
Classification	M	SD	М	SD	t
School administrator is sensitive to concerns regarding working with included students.	4.24	1.41	4.10	1.41	0.74
Students with disabilities are effectively included into regular music classes/ensembles.	3.82	1.42	3.74	1.33	0.46
Music education needs of special learners are being met in the regular music class/ensemble.	3.79	1.30	3.56	1.38	1.24
Music education needs of special learners are better met in self-contained music classes.	3.71	1.46	4.09	1.34	-1.99
Music education needs of special learners are better met in general music classes. Special learners hamper the progress of	3.57	1.42	3.80	1.43	-1.19*
students without disabilities in regular music classes/ensembles. * p<.05.	3.34	1.49	3.63	1.52	-1.40

A Pearson correlation was used to determine the relationship between respondents' overall training for working with special learners (M = 22.12, SD = 7.28) and their attitudes toward specific disabilities (see Table 15). Overall preparation was determined by adding the total amount of training for each of the eight topics on special education. This created a possible range of scores from 8-48. Low statistically significant positive correlations were found for respondents' attitudes toward mental retardation, hearing impairments, visual impairments, serious emotional disturbance, autism, and traumatic brain injury, but not for other health impairments, specific learning disabilities, speech/language impairments, or orthopedic impairments.

Table 15 Correlation Between Overall Training and Attitudes Towards Specific Disabiltiies

	Overall Preparation
Classification	r
Other health problems	0.06
Specific learning disabilities	0.09
Speech/language impairments	0.10
Orthopedic impairments	0.11
Visual impairments	0.16 *
Hearing impairments	0.18 *
Autism	0.20 *
Serious emotional/behavioral disturbance	0.21 *
Traumatic brain injury	0.22 *
Mental retardation	0.24 *
* p<.05.	

A Pearson correlation was also used to determine the relationship between overall preparation (M = 22.12, SD = 7.28) and respondents' attitudes toward inclusion (see Table 16). No statistically significant correlations were found between overall training and any attitudinal statements.

Table 16
Correlation Between Overall Training and Attitudes Towards Inclusion

	Overall Preparation
Classification	r
School administrator is sensitive to concerns regarding working with included students.	0.06
Students with disabilities are effectively included into regular music classes/ensembles.	0.01
Music education needs of special learners are being met in the regular music class/ensemble.	0.07
Music education needs of special learners are better met in self-contained music classes.	0.00
Music education needs of special learners are better met in general music classes.	-0.08
Special learners hamper the progress of students without disabilities in regular music classes/ensembles.	0.06

V. Discussion

The purpose of this study was to determine the status of inclusion in instrumental music programs in Maryland public schools and the attitudes of instrumental music teachers towards the inclusion of students with disabilities into their instrumental music programs. The results of this survey revealed the percentages of students with disabilities that have had access to instrumental music, the manner in which those students are being educated in instrumental music programs, and the attitudes of instrumental music teachers towards including students with disabilities into their ensembles. These data may help music educators and administrators in Maryland consider their own methods of inclusion in the instrumental music classroom in relation to the state findings.

Limitations of the Study

Several issues regarding the study sample affect the ability to generalize the results of the survey. Originally intended to be a population study, four state school districts opted not to participate in the survey, one of which has the largest population of instrumental music teachers in the state. Because of this, the sample used is not random and resulted in an uneven distribution of proportions of respondents from the 20 school districts who did participate. The sample also represents a disproportionate percentage of elementary band and orchestra teachers.

In addition, the researcher elected to conduct the survey via an online website, which required distributing the invitation email to participate in the study through the music area contacts for the 20 Maryland school districts involved in the study. This did not allow the researcher to directly control the distribution of the survey's hyperlink nor could the researcher control the delivery of invitation emails that were forwarded by

music department contacts. Consequently, the precise number of individuals who received the invitation email to participate in the study could not be determined due to the unexpected forwarding of the survey link through email by individuals who received the invitation to participate. This impacted the computation of the response rate of the study.

Finally, the duration of data collection was limited to three weeks due to academic time constraints, eliciting a relatively low response rate. Despite these limitations, the number of respondents (n = 214) exceeded those of the preceding surveys used as a model for the current study. The large sample size appears to allow for generalization of the results across the state, though should be interpreted with caution for those school districts who elected not to participate or who had low percentages of respondents and outside of Maryland.

Disability Representation in Maryland's Instrumental Music Classes

It appears that students with learning disabilities are the most prevalent disability population served in Maryland's instrumental music programs, followed by students with speech/language impairments. These figures are consistent with the national population, which classify learning disabilities and speech/language impairments as the two most common disabilities receiving special education services in the United States (Adamek & Darrow, 2005). Previous studies conducted in Arizona, Iowa and Kansas, and Maine also found students with learning disabilities as the predominant disability population served in music classes (Atterbury, 1998; Frisque et al., 1994; Gfeller et al., 1990). Interestingly, 47.2% of instrumental music teachers in Maryland indicated that they have never worked with a student with mental retardation, despite the fact that it is the third most prevalent disability served in America's public schools (Adamek & Darrow, 2005). This is likely

due to the fact that approximately 60% of the students with mental retardation in Maryland are educated in primarily segregated settings (MDDC, 2003), thus not having access to general education opportunities such as instrumental music. Students with autism, also primarily educated in segregated settings in Maryland, had surprisingly more representation in instrumental music classes than anticipated, as more than 50% of instrumental music educators reported serving at least one to five students with autism in their classes.

The distribution of student disabilities in Maryland is generally consistent with national population figures, though as hypothesized, the groups most segregated in the overall population in Maryland schools were also underrepresented in the instrumental music programs of the state. It appears that those students who are primarily educated in segregated settings are not afforded the opportunity to perform with instrumental music ensembles. According to IDEA, all students with disabilities have the right to access all facets of general education, including instrumental music, if instruction can be made appropriate with the necessary accommodations and services. It is the responsibility of state and local education agencies to ensure that the segregation of particular disabilities in Maryland schools is not impeding student access to instrumental music opportunities. *Implementation of Inclusion*

The findings of the present study are consistent with previous research (Atterbury, 1986/1998; Frisque et al., 1994; Gfeller et al., 1990; Gilbert & Asmus, 1981) regarding the involvement of music educators in the process and implementation of inclusion.

Although federal legislation describes inclusion as a collaborative process in which all teachers involved in educating a special learner have the right and responsibility to

participate in IEP development, student placement, and writing IEP goals, there are very few instrumental music teachers in the state of Maryland doing so. Participation in the IEP development process continues to be infrequent, though with a greater percentage (24.8%) of educators indicating at least occasional participation in the IEP development process than in previous research. Unfortunately, considerably fewer music educators (9.3%) are expected to write IEP goals at the same frequency. Infrequent teacher participation in the IEP development process may be a potential barrier to preparing for successful inclusion of special learners in instrumental music ensembles. Participation in a student's IEP planning may provide the music teacher with important information about the manner in which the student is functioning, how the student learns best, and their short-term and yearly educational goals, all pivotal to designing appropriate music instruction for the included student.

Participants reported that while they are usually or always expected to include special learners into their programs (79%), only a small percentage of the population received additional time to prepare (2.4%) or to individualize (15.4%) instruction for these students. Additionally, teachers reported rarely having adequate resources to accommodate the instruction of special learners. Inadequate preparation time and resources compounded with a lack of knowledge and involvement in the education of special learners are issues that were evident in similar survey research (Atterbury, 1998; Frisque et al., 1994; Gfeller et al., 1990; Gilbert & Asmus, 1981) and continue to be obstacles of inclusion in Maryland's school music programs.

Collaboration is cited in related literature as pivotal for effectively including students with disabilities in general education classes such as instrumental music. This is

primarily because special educators can provide music teachers with important information about students' learning styles and effective teaching strategies for appropriately serving students (Atterbury, 1998; Darrow, 1999; Hammel, 2001; Olson et al., 1997; Soodak et al., 1998). The majority of respondents (91.5%) reported that consultation with special educators was adequate, at least occasionally. The present study did not seek to determine whether the consultation was conducted formally, in official team planning meetings or informally. It is also unknown whether the music educators or special educators initiated the consultation. These data do reveal more frequent consultation between instrumental music teachers and special educators than earlier studies by Gfeller et. al (1990) and Atterbury (1998) and suggest a positive step towards cultivating collaboration among all teaching staff involved in working with special learners. Additionally, these findings could influence teacher preparation policies in both special education and music education departments regarding the value of communication amongst all faculty involved in the education of special learners.

It is important that the high reported percentage rate of instrumental music teachers indicating adequate consultation with special educators be examined in light of the types of disabilities found to be prevalent in Maryland school band and orchestra programs. This study found those disabilities classified as severe (e.g. traumatic brain injury, mental retardation) to be less prevalent in instrumental music classes. Perhaps instrumental music educators would not have felt that consultation with special educators was adequate had there been a higher percentage of students with severe disabilities.

The data show that there is considerable variety among instrumental music teachers in Maryland regarding the manner in which they establish instructional

objectives, expectations for student participation, and means of assessment for students with disabilities included into their ensembles. For example, 39.7% of participants indicated that their instructional objectives for special learners are musical while 31.8% of participants indicated that their instructional objectives for their included population are non-musical. It may be possible that these inconsistencies are due to the individualization of education for students with disabilities, in which case they can be justified. Other potential reasons for such variations could be insufficient knowledge of the student's educational needs resulting from being unfamiliar with the IEP, limited proficiency in planning instruction and objectives for special learners, and lack of standards for implementing inclusion applied by state or local agencies. It appears that there may currently be a lack of accountability regarding the policies for implementing inclusion into all facets of general education, including instrumental music. The writers of the document, Inclusive Education in Maryland (MDDC, 2003) call for the institution of inclusion standards at the state level that can be realized by individual school districts to ensure that all students with disabilities throughout the state of Maryland are receiving equivalent and appropriate accommodations and services. Perhaps such standards could aid instrumental music teachers in developing individually, appropriate instruction on a more consistent basis.

Teacher Attitudes toward Inclusion and Included Students

Teacher attitudes towards inclusion and the disabilities represented by included students have been cited as pivotal in determining their success with inclusion (Colwell & Thompson, 2000; Olson et al., 1997; Sideridis & Chandler, 1995; Soodak et al., 1998). Respondents in the present survey expressed inconsistent attitudes towards inclusion

similar to the attitudes identified as ambivalent in previous survey research (Atterbury, 1998; Daane et al., 2000, Frisque et al., 1994, Gfeller et al., 1990). It appears that the majority of music educators feel students with disabilities are effectively integrated into their general education music classes, but that these students often hinder the progress of their peers and would be better served elsewhere. The difficulties in implementing inclusion identified by instrumental music teachers in this survey, such as lack of planning time and exclusion from placement decisions and IEP development, are possible factors for the development of attitudes such as these. Because teacher attitudes toward inclusion have been identified as vital to the successful realization of inclusion (Colwell & Thompson, 2000; Olson et al., 1997; Sideridis & Chandler, 1995; Soodak et al., 1998), these inconsistent attitudes towards including special learners may impact the delivery of instruction and services for students with disabilities into instrumental music classes.

Certain disabilities are identified as being more difficult to accommodate in the music classroom than others, generating feelings of discomfort toward the disabilities on the part of music educators. In the past, music educators have expressed negative attitudes towards working with disabilities that are academic in nature (e.g. mental retardation, traumatic brain injury) or particularly disruptive, such as emotional disturbance (Darrow, 1999; Frisque et al., 1994; Gfeller et al., 1990; Sideridis & Chandler, 1995; Soodak et al., 1998; Wilson & McCrary, 1996). The severity of these disabilities has also been identified as negatively impacting teacher attitudes by Sideridis & Chandler (1995) and Soodak et. al (1998). Instrumental music educators in Maryland expressed moderate feelings of discomfort, identifying traumatic brain injury, mental retardation, serious emotional disturbance, and autism as the disabilities with which they

feel the least comfortable teaching. More positive attitudes were exhibited towards disabilities that are less severe and physical in nature, such as speech/language impairments and other health impairments. Respondents in the present study also conveyed generally positive attitudes towards specific learning disabilities, which may be due to their prevalence in general education. Music teacher attitudes towards specific disabilities appear to be consistent across the research, particularly regarding those disabilities identified as more severe in nature, and can be an impediment to appropriately serving all students with disabilities in music programs.

Influence of Training on Working with Special Learners

The majority of instrumental music educators in the state of Maryland report that they have had training on special education topics such as disability awareness, exceptional children, adaptive strategies, and special music education. Previous researchers found that approximately 40% of their respective sample populations had no training at all on these topics (Frisque et al., 1994; Gfeller et al., 1990; Sideridis & Chandler, 1995), perhaps suggesting that the call for more instruction has been fulfilled in the state of Maryland. Less than 10% of respondents, however, indicated any training beyond a single college course on any of these special education topics, with the majority indicating only a few hours of inservice or a portion of a college course. School inservice offerings do not appear to be occurring more often than found in previous research. The state of Maryland does not currently require a course on teaching students with disabilities for music education majors in order to attain teaching certification. It appears that the trend of offering special education training to Maryland music educators in small doses through workshops or as part of another course will continue, which some

practicing music teachers have identified as insufficient preparation for including special learners (Hammel, 2001a), unless there is a change in the state teaching certification requirements.

As in previous research, instrumental music teachers surveyed in this study also exhibited conflicting attitudes toward inclusion. Though respondents expressed a general agreement that students with disabilities were being effectively included in their ensembles, they felt equally as strong that students with disabilities are better served in self-contained or general music classes. Unlike the results of previous research (Shade & Stewart, 2001; Wilson & McCrary, 1996), the data from this survey suggests that preparation for working with special learners has no significant effect on improving teachers' attitudes toward inclusion or individual disability types, particularly those disabilities that are academic (or intellectual) in nature.

Previous researchers identified field experience with special learners as more influential in preparing teachers to work with special learners than coursework alone (Hammel, 2001a; VanWeelden & Whipple, 2005; Wilson & McCrary, 1996). The present study suggests that 76.5% of the participants who have been teaching for one to five years did have field experience with students with disabilities as an undergraduate while only 25.7% of those with more than 25 years of teaching experience had field experience. It is unknown whether these field experiences with special learners were planned or if it is only a product of the increased population of special learners in public schools over the last 30 years. While the latter is undoubtedly a factor, further research is needed to determine if music education programs are intentionally providing experiences

with special populations for their preservice teachers and in what way this impacts their attitudes toward inclusion and students with disabilities.

The findings of this study suggest that field experiences with special learners at the undergraduate level were found to have a more positive effect on teachers' attitudes toward inclusion and specific disabilities than coursework in this study. Respondents who did have undergraduate field experience with special learners did have considerably more positive attitudes towards students with traumatic brain injury, mental retardation, serious emotional disturbance, and autism. These four disabilities, regarded as severe, are those with which instrumental music teachers in Maryland expressed lower levels of comfort. These data suggest that field experience does have a positive impact on teachers' feelings towards specific disabilities, particularly those disabilities identified most often as being difficult to teach in the music classroom. In light of these findings, undergraduate music education programs might be encouraged to seek out field experience opportunities with special learners for their preservice teachers. It appears that interaction with students with disabilities at the undergraduate level has the potential to positively impact teachers' attitudes towards disabilities, particularly those that are most severe and intimidating.

There were no strong correlations found between field experience and teachers' general attitudes towards inclusion, which may have been influenced by the problems with implementing inclusion as discussed above. Additionally, the general attitudinal statements included in this survey were not related to the instructional practices associated with field experience.

Conclusion

As hypothesized by the researcher, the current state of inclusion in Maryland's instrumental music programs appears representative of the status of inclusion for the entire state as described in the document, *Inclusive Education in Maryland* (MDDC, 2003). Those students being educated in segregated settings due to their disabilities are also underrepresented in instrumental music programs. The results of this study reveal discrepancies in the delivery of instruction to special learners included in band and orchestra classes, insufficient preparation on working with special populations for the instrumental music teacher, and conflicting attitudes toward inclusion and specific disabilities. These data may be used to promote evaluation of the manner in which students with disabilities are offered the opportunity to play an instrument and participate in ensembles in Maryland.

The present study corroborates much previous research conducted in the 1980s and 1990s. While this helps to validate the current study, there is concern that perhaps inclusion in Maryland is at the same status that other states reached between 10 and 20 years ago. Historically, Maryland was one of the first states to offer public education to students with disabilities, though the instruction was provided in segregated schools and classes, many of which continue to operate throughout the state today (MDDC, 2003). It appears that Maryland has not progressed concurrently with the development of national policies on inclusive education, resulting in a contemporary system of special education that was developed in the 1970s (MDDC, 2003). Nonetheless, it is also possible that the current study elicited results similar to those completed in the previous two decades because the status of inclusion has remained static on a national level.

With 79% of respondents indicating that they are usually or always expected to include all students with disabilities in their classes, there is a clear need to ensure that music educators are prepared to work with this population of students. The data suggest that field experiences with special learners provide the most positive impact on teachers' attitudes toward inclusion, which have been cited in the research as pivotal to successful inclusion. These data should encourage more training that provides opportunities to work with special learners in an effort to better prepare music educators to meet the needs of special populations in their band and orchestra programs.

Recommendations for Future Research

There are still many questions that remain regarding the inclusion of students with disabilities into instrumental music programs in Maryland. This study did not evaluate the current population of special learners in instrumental music programs, instead looking at the population of students with specific disabilities who have been taught by instrumental music teachers during their careers in Maryland. An examination of the current percentages of disabilities represented by students in instrumental music classes could be useful for comparison against overall state populations of students with disabilities in inclusive education and for identification of the disabilities most often served in instrumental music classes. Likewise, more research is needed to determine how specific disabilities impact learning to play an instrument. This information could allow instrumental music teachers to better familiarize themselves with the disabilities most often served in their classes and instructional strategies proven to be successful with those disabilities. Additionally, current survey research needs to be conducted in other regions around the country to determine whether the status of inclusion has changed

within the past ten years nationally and as a means of comparison for the present status of inclusion in Maryland's music programs.

It was not possible to assess through the present study why specific disabilities (e.g. mental retardation, traumatic brain injury) were underrepresented in instrumental music classes. The large population of students educated in segregated settings in Maryland prompts an inquiry into whether these students are not being afforded the opportunity to participate in instrumental music due to their segregated placement or if these decisions are made by the students' teachers and parents based on their educational needs and goals.

Further research needs to be conducted on the impact of preservice field experiences with special learners. Although the findings of the present study were not definitive, previous research has suggested that field experiences improve teacher attitudes towards inclusion and promotes confidence in working with special learners (VanWeelden & Whipple, 2005; Wilson & McCrary, 1996). However, this needs to be more fully explored to understand how it can directly improve the instruction of special learners in instrumental music ensembles. Continued research should be conducted on preparing teachers to work with special learners through coursework and inservice opportunities regarding its method of delivery and how it can be most effective in improving music educators' skills for teaching students with disabilities. The conflicting attitudes toward inclusion of music educators should be further examined for the source of the attitudes and possible strategies for improving them in the best interest of inclusive education.

Further research is also needed to assess the implementation of inclusion within general and instrumental music classes. An evaluation of the manner in which instrumental music educators establish expectations, standards of assessment, and instructional objectives for students with disabilities may reveal the strategies that are proven to be most successful and appropriate for the special learner. Continued research in this area assists music educators in refining and improving their delivery of instruction for all students, with and without disabilities, in their classes.

Appendix A: Sample Assistance Request Email

Date: Thu 28 Sep 12:24:29 EDT 2006

From: Kerri Barone kbarone@umd.edu Add To Address Book | This is Spam

Subject: UMD Music Education Research

To: Dear

My name is Kerri Shelfo. I am a graduate student in the Music Education Division at the University of Maryland, College Park. This semester I have begun work on my thesis, in which I will be conducting a survey of instrumental music teachers to determine their training in working with special learners and the state of inclusion in their instrumental music programs. I am writing because I need your assistance with my study. I plan to conduct an online survey and believe I will get the greatest response rate if I send an email invitation to the participants that includes a link to the web site. While I understand it is unlikely that I will be able to obtain the email addresses of all instrumental music teachers in the state of Maryland, I am hoping it will be possible to forward this email invitation to participate in the study through the Music Coordinators in each county. Would you be willing to forward this email to your instrumental music teachers? In addition, could you share with me the number of instrumental music teachers in your county (Band and Orchestra only)?

Thank you in advance for your assistance with my study. I look forward to hearing from you.

Sincerely,
Kerri Shelfo
Graduate Assistant
University of Maryland School of Music
Music Education Division
Email: kbarone@umd.edu

1. Statement of Consent

* 1. This is a research project being co Education Division at the University o teachers in the state of Maryland are k Your participation in this survey is con	f Maryland, (peing invited	College Parl to participat	k. All instrumenta te in this research	l music project.
at all. Please acknowledge your consen		•	•	-
to the survey.			•	· ·
I confirm that I am at least 18 years for a research project through the Ur	niversity of Ma	aryland, Coll	ege Park.	is survey
I do not wish to participate in this stu	•			
There are 5 pages of questions, which Please complete all questions. Thank y				omplete.
2. Demographics				
Page 2 of 6				
* 2. What is your predominant teaching			_	
Please answer all remaining survey qu	estions accor	ding to your	response here.	
Band				
Strings				
General music/Vocal				
Guitar				
Other (please specify)				
* 3. Which age group(s) do you teach? (Check all that apply) Elementary Middle School High School * 4. In which county do you teach? * 5. How many years have you taught 3. Experience with Special Learners Page 3 of 6 * 6. Indicate the approximate number	public school		wing disabilities t	hat you
have taught in your music classes. (Stu				
Plan due to the disability.)				
	None	Few (1- 5)	Several (6-12)	Many (13+)
Mental Retardation	0	0	0	0
Hearing Impairments			0	0
Speech/Language Impairments				

Severe Visual Impairments (including blindness)	0	0		0	0			
Serious emotional disturbance	0	0		0	0			
Orthopedic Impairments								
Autism	0	0		Ŏ	Ö			
Traumatic brain injury		- O		0	0			
Other health impairments	0	- 5		0	0			
Specific learning disabilities				Ŏ				
* 7. How many of your special education	student	s were:						
The second secon	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~		Some	3.6	. 11			
	None	Few (<10%)	(11- 50%)	Many (>50%)	All (100%)			
Mainstreamed: Students are included into music because they have the skills to participate, but are not regular members of general education classes.	0	0	0	0	0			
Integrated: Students participate in music class primarily for socialization purposes, not for academic purposes.	0	0	0	0	0			
Inclusion: Students are full members of their general education classes and have access to all educational opportunities in the school, including music. Students receive special education services within those classes.	0	0	0	0	0			
	h disabil	lities in newfo	wming on	gambles an	a			
* 8. In addition to including students wit								
general music classes, identify all other r in your school.	nusic ins	truction opt	ions for sj	peciai iearii	ers			
Separate (self-contained) music classes teacher.	for stud	ents with disa	abilities ta	ught by a m	usic			
A music therapy consulatant teaches m	usic to so	ome or all stu	dents with	n disabilities	.			
Other (please specify)								
Cuter (preuse speetry)								
4. Training								
Page 4 of 6								
* 9. For the topics listed below, please ide	entify th	e level of you	ır educati	onal prepa	ration			
using the following criteria:	·	·						
1 = no formal education or inservice in the	his area							
2 = a few hours of workshops or inservic	e trainin	g						
3 = a portion of a college course on this t	opic							
4 = a college course on this topic								
5 = a college course and some additional								
6 = several college courses and on-going	participa	ation in worl	kshops or $_{\it \Delta}$	inservice 5	6			
Abnormal psychology	_	<i>J</i>						
Exceptional children	<u> </u>	0	0	0	0			
Child psychology or child	3	7						
development								

Special (or adap	otive))	0		0	(3)	- 0		
music education									
Music for speci)	(1)	0	(1)	(1)			
populations (e.g									
therapy courses	•								
Special education)	(1)	0	0				
legislation	_ `			_					
Adaptive strates	gies)	(1)	(1)	(1)	(1)	(1)		
Disability awar		à		<u> </u>					
•	l provides inser	vices or	worksh	ons on working	with speci	al learn	ers.		
•	•	once	a school		of				
monthly	once a semeste	r	ear	staff	not	at all			
		,	Cui	54411					
						ì			
* 11. How fam	iliar are you wi	h the fol	lowing s	special educatio	n laws?				
11.1101/11.	Not at all famil		2	3	4	Verv	familiar (5)		
Individuals	1 (of at all falling	iai (1)	(1)	Ŏ	(1)	v er y	Turriffica (5)		
with									
Disabilities									
Education Act									
(IDEA 2004)									
Individualized			(1)	(1)	(1)		C		
Education	_				_				
Plan (IEP)									
Least	(1)		(3)		(1)		(1)		
Restrictive									
Environment									
(LRE)									
504 Plan									
		_							
5 Inclusion Du	5. Inclusion Practices								
	actices								
Page 5 of 6						ē			
	he following qu				cy of occur	rence ir	n terms of		
your predomin	ant subject are				T T	11	A 1		
T	TED .		ever	Occassionally	/ Usu	ally	Always		
	EP programmin	g)		-)			
for students wit									
•	eneral education								
music classes.	1						(-)		
I participate in t		4)		-)	9		
making process									
placement of students with disabilities into music classes.									
				2-1			7-1		
Students with d)		-)	0		
•	classes/ensemble	es							
based on level of	or musical								
achievement.	iachilitica in			(-)					
Students with d		4)		-)	9		
inclusion music	classes are								

accompanied by aides when the

disability requires individual support.				
I am expected to write IEP goals for musical achievement for each student with a disability who is included into my class.	0	0	0	0
I am given extra preparation time to plan for exceptional children.	0	0	0	0
I am expected to include all students with a disability who wish to participate into my elective ensembles.	0	0	0	0
Adequate consultation with special education teachers and counselors concerning included children is readily available.	0		0	0
I have adequate preparation time to individualize programs for students with disabilities.	0	0	0	0
I have adequate resource materials available for planning and working with students with disabilities.	0	0	0	0
I am expected to work on non- musical goals for students with disabilities (motor development, social skills, emotional development, communication, perceptual skills) through music activities.	0		0	0
I am expected to adapt regular music education goals and objectives for students with disabilities.	0	0	0	0
I grade students with disabilities on the same standards of musical achievement as students without disabilities.	0	0	0	0
I expect students with disabilities to participate in the same musical objectives and programming as students without disabilities.	0	0	0	0
My primary objective for students with disabilities is development of musical skills and knowledge.	0	0	0	0
My primary objective for students with disabilities is development of non-musical goals, such as self-esteem, social behaviors, and motor development.	0	0	0	

6. Teacher Attitude

Page 6 of 6

* 13. In the following questions, mark the response which best describes the situation in your school(s).

your serioor(o).	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
I feel my school administrator is sensitive to concerns I may face in working with included students.	0	0	0	9	0	0
I feel that students with disabilities are effectively included into regular music classes/ensembles.	0	0	0	0	0	0
The music education needs of students with disabilities are being met in the regular music class/ensemble.	0	0	0	0	0	0
I feel that the music education needs of students with disabilities are better met in special education classes than regular music classes.	0	0	0		0	0
Having students with disabilities in regular music classes/ensembles hampers the progress of students without disabilities. * 14 Please answer the					9	0

* 14. Please answer the following question in terms of the disabilities listed below. I would feel comfortable working with students with the following disabilities in my music classes:

emsses.	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
Mental retardation		0			0	
Hearing impairments	0	0	0	0	0	0
Speech/language impairments	0	0	0	0	0	0
Visual impairments	0	0	0	0	0	0
Serious emotional/behavioral disturbance	0	0	0	0	0	0
Orthopedic			0		0	

impairments						
Autism	0	0	0	0	0	0
Traumatic brain injury	0	0	0	0	0	0
Other health problems(such as asthma, heart problems or other chronic illnesses)	0	0	0	0	0	0
Specific learning disabilities	0	0	0	0	0	0

7. Thank You!

Thank you for the taking a moment out of your very busy day to participate in this survey! Your time and effort are sincerely appreciated!

Appendix C: Pilot Study Assistance Request Email

Date: Wed 15 Nov 15:09:21 EST 2006

From: Kerri Barone kbarone@umd.edu Add To Address Book | This is Spam

Subject: Pilot survey assistance needed

Hi

I am writing to see if you could help me with my pilot study for my thesis. I am conducting a survey titled, "The state of inclusion in instrumental music programs in Maryland" for my thesis at the University of Maryland, College Park. I need to conduct a pilot study, but the teachers cannot be from Maryland since that is my sample. I was wondering if you would be able to forward a link to all of the string and band teachers in Fairfax County. I will not be using ANY of their responses in my data. The responses will only be used to evaluate my survey before sending it out to my official sample. I know that this is bad time since everyone is about to leave for the VMEA Conference, but I do not need the responses until December 1st. Please let me know if it's a possibility and I will send an official email with the invite to the survey. Thank you so much!!

Kerri (Barone) Shelfo http://www.surveymonkey.com/s.asp?u=694422781929

Appendix D: Pilot Study Invitation Email **Date:** Mon 20 Nov 12:36:37 EST 2006

From: Kerri Barone kbarone@umd.edu Add To Address Book | This is Spam

Subject: Instrumental Music Teacher Survey

Hello Fairfax County Band and Orchestra Teachers!

I am currently a graduate student in music education at the University of Maryland, College Park and I am writing to request your assistance with my thesis. I am conducting a survey of instrumental music teachers and need to conduct a pilot study to evaluate my survey tool. If you are willing to participate in the study, please click on the link below to complete the survey. I would appreciate if you could complete the survey by next Friday, December 1st. The survey should not take more than 10-15 minutes to complete. Thank you in advance for your assistance!

http://www.surveymonkey.com/s.asp?u=694422781929

Sincerely, Kerri Shelfo Graduate Assistant University of Maryland School of Music Music Education Division

Email: kbarone@umd.edu

Appendix E: First Study Invitation Email to Music Division Contacts

From: Kerri Barone kbarone@umd.edu Add To Address Book | This is Spam

Subject: University of Maryland Music Education Survey

To:
Dear Mr.

I am writing to you regarding the survey of instrumental music teachers that I will be conducting to fulfill my graduate thesis in music education at the University of Maryland, College Park. It is time for the survey to begin! I contacted you in the fall about this project and you agreed to forward a link for the survey to all of the instrumental music teachers in your county. This email will be followed by an invitation to participate in the survey with directions. Please forward this email to your band and orchestra teachers as soon as possible to allow them adequate time to take the survey. The survey will be open from today, February 8, 2007 through March 2, 2007. During that time I will send two additional reminder emails to solicit as many responses as possible. I sincerely appreciate your assistance with my study and look forward to receiving the responses from your county.

Thank you, Kerri Shelfo

Appendix F: First Study Invitation Email

From: Kerri Barone kbarone@umd.edu Add To Address Book | This is Spam

Subject: UMD Music Education Survey

To:

Dear Instrumental Music Teachers,

I am writing to request your assistance. I am conducting a survey of all instrumental music teachers in the state of Maryland for a graduate thesis project at the University of Maryland, College Park. Please take a few minutes from your very busy day to complete this survey using the following link:

http://www.surveymonkey.com/s.asp?u=694422781929

The survey should take approximately 10 minutes to complete. All responses will be kept confidential and I will be happy to share the results at your request. Your response is critical to this study and I hope you will be willing and able to participate. Thank you for your consideration of my request. Please feel free to email me with any questions at the address below.

Sincerely, Kerri Shelfo Graduate Assistant University of Maryland School of Music Music Education Division

Email: kbarone@umd.edu

Appendix G: Second Study Invitation Email to Music Division Contacts

Date: Thu 15 Feb 22:25:54 EST 2007

From: Kerri Barone kbarone@umd.edu Add To Address Book | This is Spam

Subject: University of Maryland Music Education Survey - 2nd email

To:

Dear Mr.

I will be sending the second email to request participation in my thesis survey. I would appreciate it if you would forward as soon as possible. Thank you for your continued assistance with my research project!

Appendix H: Second Study Invitation Email

From: Kerri Barone <kbarone@umd.edu> Add To Address Book | This is Spam

Subject: Please participate - UMD Music Education Survey

To:

Dear Instrumental Music Teachers,

Thank you to all those who have already participated in the survey on special learners in instrumental music classes. Your responses are valued and will aid in the assessment of inclusive music education in the state of Maryland. If you have not completed the survey, I urge you to please take a few minutes to share your experiences and perspective to help provide a comprehensive evaluation. I will only be able to analyze completed surveys, so please make every effort to answer all 15 questions on the survey.

Please click on the following link for direct access to the survey: http://www.surveymonkey.com/s.asp?u=694422781929

The questionnaire should take approximately 10 miunutes to complete. All responses will be kept confidential. There will be no analysis of individual responses, though analysis will be conducted according to county and student age group. I will be happy to share the results at your request. Again, your response is critical to this study and I hope you will participate. Thank you for your consideration of my request and feel free to email me with any questions at the address below.

Sincerely,

Appendix I: Final Study Invitation Email to Music Division Contacts

From: Kerri Barone <kbarone@umd.edu> Add To Address Book | This is Spam

Subject: Final Request - UMD Music Education Survey

To: (a)

Dear ,

Thank you for all of your help so far with my thesis survey on special learners. This is the last request for participation, as the survey will close this Friday, March 2nd. The final email to your instrumental music teachers will follow and I ask that you please forward it as soon as possible to all the instrumental music (band and orchestra) teachers in your county.

Again, I sincerely appreciate your assistance with facilitating my study in your county.

Appendix J: Final Study Invitation Email

From: Kerri Barone kbarone@umd.edu Add To Address Book | This is Spam

Subject: Final Request - UMD Music Education Survey

To: acohn@aacps.org

Dear Instrumental Music Teachers,

This is your final opportunity to participate in the survey on special learners in instrumental music classes, as it will close this Friday, March 2nd. Thank you to all those who have already participated in the survey. Your responses are valued and will aid in the assessment of inclusive music education in the state of Maryland. If you have not completed the survey, I urge you to please take a few minutes to share your experiences and perspective to help provide a comprehensive evaluation. I will only be able to analyze completed surveys, so please make every effort to answer all 15 questions on the survey.

Please click on the following link for direct access to the survey: http://www.surveymonkey.com/s.asp?u=694422781929

The questionnaire should take approximately 10 minutes to complete. All responses will be kept confidential. There will be no analysis of individual responses, though analysis will be conducted according to county and student age group. I will be happy to share the results at your request. Again, your response is critical to this study and I hope you will participate. Thank you for your consideration of my request and feel free to email me with any questions at the address below.

Sincerely,

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