Instruction of Hearing Impaired Students in School Instrumental Music Programs

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Instruction of Hearing Impaired Students in School Instrumental Music Programs

by

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ABSTRACT

Despite several major advances in education for people who are deaf or hearing impaired, there are still some pervasive negative attitudes and perceptions in the education world towards this community of students. The purpose of this study was to discover the attitudes and perceptions that band directors in Mississippi public schools have towards hearing impaired students participating in instrumental ensembles. This study utilized a survey that was sent to every director in the state. The survey contained several questions pertaining to whether directors had ever had a hearing impaired student in their ensembles before, what accommodations were made for those that have, and whether directors would be likely to attend workshops and seminars concerning hearing impaired students as they relate to the musical world.

The results indicate that there are indeed negative attitudes among some directors towards hearing impaired students participating in instrumental ensembles, and there is an unwillingness to learn more about hearing impaired students, as well as an unwillingness to be taught effective ways to teach these students music. Despite the negative attitudes, though, the majority of participants reported that they have little to no issues with hearing impaired students participating in their ensembles. The general response towards educational workshops was less than enthusiastic, though. This is quite concerning. If the attitude towards hearing impaired students in music is ever going to change, it is going to take a lot of effort and a lot of education.

**Keywords:** hearing impaired, music education, secondary education, Mississippi, public schools, band directors, instrumental ensembles, music workshops
# TABLE OF CONTENTS

## CHAPTER

#### I. INTRODUCTION

- Statement of the Problem
- Famous Deaf Musicians
- Research Questions
- Definition of Terms
- Limitations
- Assumptions

#### II. LITERATURE REVIEW

#### III. METHODOLOGY

- Variables
- Sample
- Research Instrument

#### IV. RESULTS

#### V. CONCLUSION

REFERENCES

APPENDIX A

APPENDIX B

APPENDIX C
CHAPTER I

INTRODUCTION

It is difficult for deaf or students with hearing impairments to be taught in a public school system. Many are educated in schools for the deaf. Recently, there have been advances in special education in public schools, and so it is much more common for a hearing impaired (HI) student to be taught in a public school (Graham, 1975). Despite these advances, it remains difficult to involve HI students in music classes and music ensembles, particularly in secondary education. According to Graham, “the general public still thinks negatively about the possibility of using music with children who have auditory problems” (p. 48). Initially, one might assume this to be true. Graham goes on to say that “music educators . . . have avoided schools for the deaf and classes for the deaf or hard-of-hearing in the public schools through a basic misconception of these children’s abilities in music. Often there is a bias on the part of parents, music educators, deaf educators, and the general public that anything involving hearing is beyond the capabilities of these children” (p. 48-49).

Statement of the Problem

HI students have not been seen much in public school ensembles, and consequently, the idea that deaf or HI students are unable to participate in music classes may be the perception of the general public. While some schools and educators have become more open-minded and willing to learn and adapt, others have not. Despite evidence that shows that HI students do indeed have the capacity and ability to become
successful musicians, some instructors are still reluctant to recruit these students to be in their ensembles (Hash, 2003). Darrow (2007) says that “some people believe that to be musical one must have good hearing; however, many students with hearing losses are indeed musical, just as there are many students with good hearing who are not musically inclined. There are some deaf or hard of hearing students whose brains are wired to be musicians, and consequently, they have developed good listening skills” (p. 1).

Famous Deaf Musicians

There are a couple of famous musicians – Ludwig van Beethoven and Evelyn Glennie – whose lives help to show something different than the attitudes and perceptions that are wrongly associated with this area of HI people. Ludwig van Beethoven (1770-1827) began to lose his hearing in 1801. His hearing deteriorated throughout his life, until his death. However, this did not stop him from composing and did not stop him from performing until the last years of his life.

Over time, his hearing loss became acute: there is a well-attested story that, at the premiere of his Ninth Symphony, he had to be turned round to see the tumultuous applause of the audience, hearing nothing. In 1802, he became depressed, and considered committing suicide. He left Vienna for a time for [a] small Austrian town of Heiligenstadt, where he wrote the "Heiligenstadt Testament", in which he resolved to continue living through his art. He continued composing even as his hearing deteriorated. After a failed attempt in 1811 to perform his own "Emperor" Concerto, he never performed in public again (Beethoven, 2007, p. 1).

Beethoven is one of the most famous composers and musicians in history, and he was able to accomplish all that he did in spite of, and perhaps as a result of, his hearing impairment. Though it tormented him to slowly lose the ability to hear his own music, over time he has become legendary and has stood the test of time (Beethoven, 2007, p. 1).
Beethoven lived much of his life being able to hear “normally,” and later became HI. As a result, it is likely he experienced music and the world much differently than someone who is born deaf or hard of hearing. Evelyn Glennie is an excellent example of someone who has spent her entire life with diminished hearing and has come out on top in the musical world as a result of her hearing impairment.

Evelyn Glennie is a world famous percussionist. In fact, she is the world’s first successful, full-time solo percussionist. She has also been profoundly deaf since the age of twelve. She began losing her hearing at age eight. However, she was fortunate enough to have good music instructors who were patient and helped her to become who she is today. She chooses not to let people see her as a deaf musician, but simply as a musician. In her Hearing Essay, she states:

If the audience is instead only wondering how a deaf musician can play percussion then I have failed as a musician ... my hearing is something that bothers other people far more than it bothers me. There are a couple of inconveniences but in general it doesn't affect my life much. For me, my deafness is no more important than the fact [that] I am female with brown eyes. Sure, I sometimes have to find solutions to problems related to my hearing and music but so do all musicians. Most of us know very little about hearing, even though we do it all the time. Likewise, I don't know very much about deafness, what's more I'm not particularly interested. I remember one occasion when uncharacteristically I became upset with a reporter for constantly asking questions only about my deafness. I said: 'If you want to know about deafness, you should interview an audiologist. My speciality is music (Glennie, 1993, p.1).

It is important to focus on the fact that she is an extremely talented musician and her disability has not stopped her from sharing her music with others.

There is no standard or legal definition of people with a hearing impairment. Typically, when we speak of a person who can hear, or has normal hearing, we mean he or she can hear well enough to understand speech. There is a difference between being deaf and being hard of hearing. A deaf person cannot use his or her hearing to understand speech, even with a hearing aid, although the person may be able to perceive
other sounds. A hard of hearing person has significant hearing loss which makes speech difficult to understand, but can be helped with adaptations, such as hearing aids or Cochlear implants (Heward and Orlansky, 1984, p. 229-230). This being said, total deafness is rare, and so the term “hearing impaired” will be used in this study, rather than “deaf” (Graham, 1975, p. 48).

Research Questions

While the public education system has made great strides with HI students being mainstreamed, there is much that can be improved. For instance, students are placed in public schools, but are the teachers fully prepared to teach these students with the proper accommodations? What are the reactions and attitudes of the music educators in these situations, and what can be done to help make an educational experience more meaningful for both the student and the teacher?

The purpose of this study is to investigate the perceptions and attitudes of band directors teaching secondary education in Mississippi regarding the inclusion of HI students in performing ensembles and in music programs in general. Would directors be willing to attend workshops in order to receive training? What accommodations do directors think should be made for these students? The following questions were implemented in a survey and submitted to band directors in the state of Mississippi in order to solicit their responses dealing with HI issues.

1. Have the participants had a student(s) who was (were) hearing impaired in an ensemble before?

2. What accommodations were made for these HI students?

3. What more could be done for these HI students?
4. What is the general attitude and perception of the participants in dealing with HI students?

5. Would the participants go to seminars or workshops on special education in music classes, with emphasis on HI students?

Definition of Terms

*Cochlear Implants* – surgical implants available to those with severe to profound hearing loss; a set of electrodes is implanted into the cochlea and are connected to a receiver that captures sounds and encodes them into electrical stimulation

*Deafness* – a person who cannot use hearing with or without a hearing aid to understand speech, even though that person may be able to hear some sound

*Hard of Hearing* – people who have a significant enough hearing loss that some special adaptation is required to understand speech

*Hearing Impaired* – a generic term that is often inaccurately used to include all hearing loss

*Mainstreaming* – placing a special needs student in a public or mainstream school setting, integrating the special needs students with “normal” students and a normal classroom setting

*Normal Hearing* – people who are able to hear well enough to understand speech without relying on special aids or techniques

*Teletypewriters* – specially designed telephone systems that allow messages to be typed into the system and receive typed replies

Limitations
This study was conducted in the state of Mississippi, and may not be a true representation of all directors in all states or areas of the United States. The participants were secondary instrumental music educators in the public school system. Self-report data is not always reliable due to human nature. Northrup (1996, p.1) writes, “Whether or not people tell the truth when answering questions as part of a survey is a thread that is woven through past methodological work on survey research.” Participants could feel the pressure to make themselves look better to the public eye and so they are likely to lie or exaggerate their answers. Northrup goes on to say that while a small percentage of participants will be dishonest with their answers, surveys are structured to encourage honesty by making participation voluntary and anonymous. Northrup continues:

Participation is voluntary and in most surveys one quarter to one third of the people approached to participate decline. While some respondents may feel it is bad manners not to assist in a survey, and others may feel pressure to participate because the government or another powerful group is conducting the survey, most people who complete the survey do so willingly. The survey puts respondents in a position where they are told that they have something to contribute and their views matter; that is, the survey approach creates the dynamics for truth-telling. Good interviewers convey to respondents that all answers are acceptable. Some people will give honest answers as they believe in telling the truth, others because they do not feel the need to give socially acceptable answers, and others will be more likely to be honest because of the way the interview is conducted. For these respondents, voluntary participation, encouragement to voice their views, and assurances that there are no right or wrong answers will help them overcome the need to give the socially acceptable answer (Northrup 1996, p.1).

This study recognizes the factor of dishonesty in dealing with self-report data, and that there is no control on the return of surveys and no control of the validity of data.

Assumptions

1. There have been very few hearing impaired students in public high school band programs in Mississippi.
2. The music educators in the state of Mississippi have not given much thought towards accommodations for hearing impaired students, regardless of whether they have had any in their ensembles or not.

3. It would be difficult for these directors to find the time for extra training or extra workshops, regardless of whether they would be willing to or not.

With more information on the perception and attitudes toward the students in the deaf community in Mississippi, educators and public school systems can move further forward in providing quality education for all students, regardless of impairments or disabilities. This study will display the general attitudes and perceptions of the participants, with the focus being in the state of Mississippi. In addition, this study will help to show what resources are being used effectively, what could be used more effectively and efficiently, and what additional resources need to be added for music educators, whether that be in the form of workshops, videos, or any other type of instructional help.
CHAPTER 2
LITERATURE REVIEW

Hearing Impaired and Disability Laws

The history of the Americans with Disabilities Act (ADA) began long before it was introduced to Congress. The fight for disabled children and adults grew as a movement during the fight for segregation and civil rights (Mayerson, 1992, p. 1). A historic moment for people with disabilities was the passing of Section 504 into the Rehabilitation Act of 1973. Section 504 finally banned discriminating against a person being the recipient of federal funds on the basis of disability. This was patterned after similar laws for banning discrimination based on sex, race, and ethnic origin. Section 504 was also historic because for the first time, people with disabilities were recognized as a minority group. After years of battling legislation and many meetings with Congress, the new ADA was introduced into the 101st Congress on May 9, 1989. Following many meetings with committees, the revisions to the ADA were completed, and on July 26, 1992, the employment provisions in Title I of the ADA became effective.

This increasingly raised awareness of people with disabilities, and for the first time business people were forced to think of accommodations to buildings for people with disabilities (Mayerson). Mayerson goes on to say that “the ADA is based on a basic presumption that people with disabilities want to work and are capable of working, want to be members of their communities and are capable of being members of their communities and that exclusion and segregation cannot be tolerated.” According to Culatta, Tompkins, and Werts (2003), when the Individuals with Disabilities Education
Act (IDEA) passed in 1975, it brought the concept of providing the least restrictive environment for students with special needs to the table, and schools began to reform and to mainstream these students. It was since revised multiple times, with the most recent revision being in 2004. Mainstreaming involves placing special education students with as many nondisabled students as possible. However, this is more difficult for deaf students. In 1988, the Commission on the Education of the Deaf made a recommendation to Congress that this was not necessarily the best situation for all HI students, and that students should be able to have a variety of options available for their education. As a result, “approximately 80 percent of children who are deaf in the United States attend local public schools; about 50 percent of these children are integrated into a regular classroom for at least a part of the school day” (Culatta et al., 2003, p. 267). With many HI students in public schools, it should not be a surprising concept that HI students may want to be in a public school music ensemble. It is therefore critical that public music educators in secondary education should be both well educated in helping to accommodate these students in the event that they may teach them and to have a positive attitude towards working with these students, no matter how unconventional it may be.

Mainstreaming Students

Mainstreaming has been particularly difficult for HI students, as they require extra attention and accommodations, whether they would want them or not. It is even more difficult to place HI students in public music programs. Music therapy is an excellent resource, but music therapy cannot replace the music making experience that can happen in the large ensemble setting. Straus (2011) tells us “because musical hearing is learned,
not given, in principle all sorts of musical hearing are accessible to everyone. But in practice, for any of the modes of hearing . . . some effort may be required . . . and success is not guaranteed in advance” (p. 160). Simply put, anyone can learn music, but everyone needs to be taught. Some may need additional help, but this does not mean they cannot learn. This understanding in which everyone can be taught, regardless of disabilities, is critical for music educators in understanding their role in helping students with special needs, and in particular, those who are hearing impaired.

There are good options for students to help themselves with their hearing impairment. These options further their integration with (I have omitted the word “normal” here; after this revision it no longer seems necessary) hearing people. These options include, but are not limited to, cochlear implants, computers, assistive communication devices such as teletypewriters, captioning such as closed captioning on televisions, and alerting devices that allow the person to see a flashing light rather than hear a sound that the (I have omitted the word “normal” here as well) hearing people rely on for sounding devices such as doorbells, alarm clocks, and fire detectors. Teachers have options available to them to assist with the learning and further education of the HI students, such as wearing amplification systems that are connected to a microphone the HI student wears, providing educational interpreters or note takers in class, or providing tutoring services. For music educators, this may mean using a microphone that is connected to a hearing aid. An amplification system can be used that the student would wear for the portion of class while instructions were given. Private lessons from an earlier age than when other students typically start in the public setting may also help HI students (Culatta, Tompkins, Werts, 2003).
Musical Instruments for HI Students

There are certain instruments that may be more suited for HI students than others. Hash (2003) recommends the harp and guitar as good choices. Students can hold the instrument close to his or her body and feel the vibrations; however, stringed instrument such as the violin and cello would not necessarily be good choices as it is sometimes difficult to hear the intonations, even for people without a hearing impairment. Hash also writes that the woodwind instruments are considered good instruments too, with both clarinet and saxophone using one fingering per note and having a wide frequency range. Hash explains that brass instruments are not the best to use for HI students as the overtone series allows the manipulation of pitches primarily through the lips and the ears; students must be able to hear frequencies quite well in order to accurately play pitches. In particular, the slide trombone and the French horn require a very high level of pitch discrimination. Hash states that percussion instruments are excellent. The student is able to feel the vibrations of the instruments easily and learn what the different vibrations mean, making it easier to play the instruments. These instruments rely heavily on rhythmic techniques and students do not have to be able to discriminate between different pitches as much as they would with a brass instrument.
CHAPTER 3

METHODOLOGY

Variables

This study utilized a descriptive research methodology, with the instrument being in the form of an online survey to be electronically mailed to middle and high school band directors in the state of Mississippi. The variables dealing with status that will be examined in this study are age, years of experience, size of school, size of ensemble, and how many years the participant has been at his or her current school. All other variables will include whether the director has had a hearing impaired student in his or her ensemble, accommodations made for said hearing impaired students, the director’s thoughts, attitudes, and perceptions on hearing impaired students being in his or her ensemble, and how willing a director would be to go to workshops specializing in education of the deaf if the need may arise.

Sample

This study examined middle and high school band directors in the state of Mississippi who teach in the public school system. Participants were those who completed the online survey. Although this study does not represent music educators in all states, it sought to represent the entire population of middle and high school directors in the state of Mississippi.

Research Instrument
Due to limited research in this specific field, the research instrument was piloted in this study and was emailed to eligible participants and a deadline for submission was given. The greatest limitation of this study depended on the participant’s honesty about their experiences. If the participant chose to fabricate his or her experience in any way, it would give an inaccurate portrayal of all the directors in the state. Other limitations included being restricted only to Mississippi, being restricted to middle and high school band directors, and excluding elementary school and college band directors.
CHAPTER 4

RESULTS

There were 24 total responses on the survey that was emailed to band directors in the state of Mississippi, and there are approximately 700 to 1000 band directors in the state of Mississippi. The researcher does acknowledge that this sample size is low, and may not accurately reflect the population. However, this sample does serve its purpose for this research project. The vast majority of participants were between 20 and 59 years old, and most have been teaching between one and 10 years. Participants in this survey teach bands ranging from a 3A classification to a 6A classification, with school sizes following accordingly.

Nine participants (38% of total participants) indicated that they have had an HI student in their ensemble, and 15 participants (62% of total participants) indicated that they have not. As shown in Appendix A, eight of nine participants (88%) selected the option for extra tutoring or lessons as an accommodation used to help HI students learn their instruments. While other accommodations were reported as being used, 55% of the participants indicated that tutoring and extra lessons were the only accommodations given. Fourteen of 15 participants (93%) that have not had an HI student in their ensembles indicated they would allow an HI student to be in their ensembles, and one participant indicated he or she would not allow an HI student in their ensemble. However, nine of 15 participants (60%) indicated that an HI student would have difficulty learning an instrument without a great deal of extra help. Several respondents indicated that while an HI student could participate in their ensembles, the student would
only be allowed to participate in a certain ensemble. Three of 15 participants (20%) indicated that an HI student said that the student could participate in all ensembles.

When asked about the likelihood of attending a workshop or seminar that dealt specifically with music and HI students, every participant who has had an HI student indicated that he or she would be likely or very likely to attend. However, 40% of participants who have never had an HI student indicated that he or she would be unlikely or very unlikely to attend a workshop. In addition, of the participants who would allow an HI student to be in an ensemble, 33% of those indicated that they would not attend a workshop. Furthermore, there was one participant who not only would not allow an HI student in his or her ensemble, but also would not attend a workshop.
CHAPTER 5
CONCLUSION

After the survey responses were tabulated, the researcher’s hypotheses were confirmed. There have been very few hearing impaired students in high school band programs in Mississippi. The general perception that band directors in Mississippi have toward hearing impaired students reflects a lack of understanding and education about hearing impairments when combined with music. There is little effort to attend workshops or extra training regarding hearing impaired students in music.

The researcher concludes that the results indicate two areas of concern. First, there were multiple participants who would not allow a hearing impaired student to be in both concert and marching band, most likely based on beliefs that the student could not contribute to the group or that the student would hold the group back. Second, the survey results indicate a lack of education and the unwillingness to learn more about hearing impaired students involved in band and music. Finally, for those having had a hearing impaired student in their ensembles, it is clear that those educators have demonstrated much thought with accommodations for these students in order to help them succeed. It is the opinion of this researcher that providing accommodations for hearing impaired students and allowing them to participate in ensembles is key to growth in knowledge of and in the perception of hearing impaired students in instrumental music programs.
REFERENCES


http://www.evelyn.co.uk/Resources/Essays/Hearing%20Essay.pdf


http://dredf.org/publications/ada_history.shtml


APPENDICES

APPENDIX A

CHART OF ACCOMMODATIONS PROVIDED
APPENDIX B

SURVEY INSTRUMENT

Please answer each question by circling the appropriate answer or filling in the blank with your answer.

1. What is your age?
   - 0-19
   - 20-34
   - 35-59
   - 60 and over

2. What degrees do you hold and what is the emphasis for each degree?
   - Bachelor’s
     - Music Education
     - Music Performance
     - Praxis II/Alternative Certification
     - Non-music
   - Master’s
     - Music Education
     - Music Performance
     - Praxis II/Alternative Certification
     - Non-music
   - Doctorate
     - Music Education
     - Music Performance
     - Praxis II/Alternative Certification
     - Non-music
   - Other
     ______________________________________________________
     ______________________________________________________

3. How long have you been teaching?
   - 1-5 years
   - 6-10 years
   - 11-15 years
   - 16-20 years
   - 21-25 years
   - Over 25 years

4. How long have you been teaching at your current school?
   - 1-5 years
   - 6-10 years
• 11-15 years
• 16-20 years
• 21-25 years
• Over 25 years

5. What is the size of your current school?
• 1A
• 2A
• 3A
• 4A
• 5A
• 6A

6. What is the classification of your band program?
• 1A
• 2A
• 3A
• 4A
• 5A
• 6A

7. Have you ever had a hearing impaired or deaf student in your band program?
• Yes
• No

If you answered yes to question 7, please answer questions 8 and 9, and skip questions 10 and 11. If you answered no to question 7, please skip questions 8 and 9, and answer questions 10 and 11.

8. What accommodations were made for the student(s)? Check all that apply.
• Having a service provider available, including but not limited to a sign language interpreter, oral interpreter, or note taker
• Wearing an amplification system, such as a microphone that is connected to the student’s hearing aid or Cochlear implant
• Providing extra tutoring or lessons with the student
• None
• Other: ____________________________________________________________

9. If there are any accommodations that were not made for this student(s) that you would have liked to be made available, please list those here.
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________
10. Would you allow or accept a hearing impaired or deaf student to be in your program?
   - Yes
   - No

11. Do you think a hearing impaired or deaf student in your program would have any of these limitations? Check all that apply.
   - The student could only be in a concert band ensemble, and could not be in the marching band.
   - The student could only be in the marching band, and could not be in a concert ensemble.
   - The student would have limited success concerning chair placement tests.
   - The student would have great difficulty learning an instrument without a great deal of extra help.
   - Other: ____________________________
   - None of these/The student could participate in all ensembles normally.

12. If there were workshops or seminars offered in special education that specialize in music and deal specifically with deaf or hearing impaired students, how likely do you think you would attend or attempt to attend?

   Very Unlikely  Unlikely  Likely  Very Likely

13. If you have any additional comments, please put those here:

   ______________________________________________________
   ______________________________________________________
   ______________________________________________________
   ______________________________________________________
APPENDIX C

IRB APPROVAL LETTER

INSTITUTIONAL REVIEW BOARD
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NOTICE OF COMMITTEE ACTION

The project has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services (45 CFR Part 46), and university guidelines to ensure adherence to the following criteria:

- The risks to subjects are minimized.
- The risks to subjects are reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered regarding risks to subjects must be reported immediately, but not later than 10 days following the event. This should be reported to the IRB Office via the "Adverse Effect Report Form".
- If approved, the maximum period of approval is limited to twelve months.

Projects that exceed this period must submit an application for renewal or continuation.

PROTOCOL NUMBER: 14072106
PROJECT TITLE: Instruction of Hearing Impaired Students in School Instrumental Programs
PROJECT TYPE: New Project
RESEARCHER(S): Rachel Strong
COLLEGE/DIVISION: College of Arts and Letters
DEPARTMENT: Music Education
FUNDING AGENCY/SPONSOR: N/A
IRB COMMITTEE ACTION: Expedited Review Approval
PERIOD OF APPROVAL: 07/25/2014 to 07/24/2015

Lawrence A. Hosman, Ph.D.
Institutional Review Board