

“SEEING” MUSIC THEORY:
GRADUATE MUSIC THEORY FOR THE
VISUALLY IMPAIRED MUSIC STUDENT

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A MASTER’S THESIS PRESENTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF ARTS IN MUSIC EDUCATION

Liberty University
August 2019

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Acknowledgements

To my Lord and Savior whose grace and faithfulness have sustained me throughout my life: all I can say is “thank you.”

To my husband, Gray, for your support, love, and advice as I prepared this project – I am forever grateful to our Heavenly Father for allowing me the honor of being your wife and walking alongside you in this earthly life.

Table of Contents

Acknowledgements.....	i
Abstract.....	iv
List of Figures.....	v
CHAPTER ONE: INTRODUCTION.....	6
Background.....	6
Statement of the Problem.....	7
Statement of the Purpose.....	8
Significance of the Study.....	8
Research Question and Sub Questions	9
Hypothesis	9
Definition of Terms	10
CHAPTER TWO: LITERATURE REVIEW	11
Teaching Students with Disabilities.....	11
Teaching Visually Impaired Students.....	12
<i>Challenges of Teaching Visually Impaired Students</i>	12
Importance of the Student-Instructor Relationship in the Classroom	13
<i>Learning Styles of Visually Impaired Students</i>	14
Visually Impaired Students in the Music Classroom	15
<i>Braille Music Notation System</i>	15
<i>Use of Technology in Music Education</i>	16
<i>Pedagogical Consideration for Graduate Music Theory</i>	18
CHAPTER THREE: METHODOLOGY.....	21
Emerging Themes	21
Design.....	22
<i>The Addie Model of Curriculum Development</i>	22
<i>Additional Elements of Curricular Design</i>	25
Research Question and Sub Questions	26
Hypothesis	26
CHAPTER FOUR: RESEARCH FINDINGS: DESCRIPTION OF THE CURRICULUM...27	
Research Results.....	27
<i>Lack of Training for Music Educators</i>	28
<i>Importance of Training on Perception and Attitude of Educators</i>	29
<i>Performance of Visually Impaired Students in the Classroom</i>	30
Curriculum Overview	30
<i>Course Format</i>	30
<i>Curriculum Approach</i>	31
Teaching Methods.....	32
<i>Curriculum Accommodations</i>	33

<i>Course Content</i>	34
Pre-Requisites	34
Required Learning Materials	35
Learning Outcomes.....	36
Course Requirements and Assignments.....	37
CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS.....	39
Summary of Study.....	39
Summary of Purpose.....	39
Summary of Procedure.....	40
Summary of Findings and Prior Research.....	40
Limitations.....	41
Recommendations for Future Study.....	42
Implications for Practice.....	42
Curriculum Project Summary.....	43
BIBLIOGRAPHY.....	44
APPENDIX A: CURRICULUM PROJECT.....	47
CURRICULUM PROJECT BIBLIOGRAPHY.....	74
IRB Waiver.....	75

ABSTRACT

Visually impaired individuals often encounter obstacles when seeking to become financially independent and obtain marketable skills. An increase in technology has allowed visually impaired persons, who desire to further their musical skills, the capability to seek further education. However, there is a lack of curriculum, especially in higher education, for teaching music theory skills to visually impaired individuals. Because a foundational knowledge of music is developed through music theory, it is essential that music educators at higher education institutions are prepared and equipped to properly and adequately teach and prepare visually impaired individuals for the music industry. By building on the research and pedagogical suggestions of music educators, this study will suggest sustainable, proven pedagogical methods to help equip both educators and visually impaired students. The Curriculum Project will provide a framework to teach a graduate level music theory course specifically designed to meet the unique needs of visually impaired music students.

LIST OF FIGURES

1. Pre-Requisite Requirements	36
2. Required Resources and Learning Materials	36
3. Learning Outcomes	38
4. Course Requirements and Assignments	39

CHAPTER ONE: INTRODUCTION

Over the last few decades, the increase in the availability and advancement of technology has increased independence for special-needs individuals. For those with mental or physical disabilities, performing simple tasks can be difficult. Though most schools face a teacher shortage, data has shown an even greater shortage of teachers with special needs competencies.¹ Because of the skill sets and instructional tools required for teaching those with disabilities, especially in collegiate settings, special-needs students often do not have access to instruction designed to teach the visually impaired.

Background

Visually impaired students have many opportunities to contribute to society. Because of increased independence due to technology and other resources, many visually impaired students are able to enroll in, and successfully complete, both online and residential college courses. Developments in music technology software have also created avenues for visually impaired students to interact with sighted peers and other individuals in a classroom setting. Employment opportunities for blind or visually impaired individuals are often limited or non-existent.² Because of the lack of jobs available to the visually impaired in the marketplace, it is becoming increasingly popular for visually impaired students to enter the field of music. Music has become an avenue for gaining financial independence and exceling at a highly-valued skill for many

¹ North Cooc, "Teaching Students with Special Needs: International Trends in School Capacity and the Need for Teacher Professional Development," *Teaching and Teacher Education* Vol 83 (2019): 33.

² Virginia A. Jacko, Jin Ho Choi, Audrey Carballo, Brian Charlson, and J. E. Moore, "A New Synthesis of Sound and Tactile Music Code Instruction in a Pilot Online Braille Music Curriculum," *Journal of Visual Impairment & Blindness (Online)* 109, no. 2 (Mar, 2015): 153.

visually impaired people.³ Since music learning is often tactile and obtainable for the visually impaired, those with visual impairments are often able to easily apply themselves to learning an instrument.⁴ This leads to opportunities to study music more in-depth at higher levels of education, including undergraduate and graduate level music courses.

Statement of the Problem

While the number of visually impaired individuals seeking music training at higher education institutions is rapidly growing, training offered to faculty music educators at these institutions is often limited or non-existent. Some higher education music educators are hesitant when a visually impaired music student expresses interest in learning graduate-level music theory concepts.

Some music professors also lack a comprehensive understanding of how to approach concepts from a non-visual approach or make adaptations to existing curricula. As Pramila Tanwar explains, a lack of tactile or visual understanding can contribute to poor conceptual understanding for visually impaired students.⁵ Because the learning styles of visually impaired students is different from sighted students, there is sometimes a lack of a ‘teaching toolbox’ for music educator to refer to when teaching visually impaired music students in the classroom. This has often resulted in visually impaired students having a poor, or fair, understanding of music theory concepts.

³ David Christopher Baker, *Insights in Sound: Visually Impaired Musicians’ Lives and Learning*, (New York, N.Y., Routledge, 2017), Abstract.

⁴ Jacko et al., “A New Synthesis of Sound and Tactile Music Code Instruction in a Pilot Online Braille Music Curriculum,” 153.

⁵ Pramila Tanwar, “Use of Tactile Diagrams in Teaching Science to Visually Impaired Learners at the Upper Primary Level,” *Disability, CBR and Inclusive Development*. 29, no. 4 (May 14, 2019): 115.

Statement of the Purpose

The purpose of this study is to provide a curricular framework for college music educators teaching graduate level music theory to visually impaired students. The purpose of the Curriculum Project is to suggest adapted curriculum and teaching methods to teach graduate music theory skills to visually impaired students. As an integral part of teaching those with disabilities, the Curriculum Project takes into consideration the specific accommodations necessary for teaching visually impaired students while not compromising the complexity of graduate music theory concepts.

Significance of the Study

This study is significant because there is not much research that has been completed regarding how to uniquely shape curricula, especially at the graduate level, for visually impaired students. This curriculum is also significant because it provides practical training for visually impaired music students, which can help bolster confidence and self-image.⁶ For many visually impaired students, their disability already puts them at a disadvantage in the classroom regardless of their musical talents or knowledge. As David Baker and Lucy Green describe in their book *Insights in Sound: Visual Impaired Musicians' Lives and Learning*, students with visual impairments often have to muster confidence in order to be able to advocate to the instructor for their learning needs, including any curriculum adaptations or assistance needed.⁷ This curriculum was created with visually impaired students in mind and has been adapted and revised according to the unique needs of this particular group of music students.

⁶ Baker, *Insights in Sound*, 72.

⁷ Baker, *Insights in Sound*, 72.

Research Question and Sub-Questions

Many different research questions and sub-questions were considered in the process of conducting research for the creation of the Curriculum Project. The primary research question for this project is: In what ways, if any, can a visually impaired student learn graduate music theory concepts? A secondary research question considered throughout the development of this project is: In what ways, if any, does a music theory instructor need to consider pedagogical implications when teaching visually impaired students? Another important secondary research question that was considered is: To what extent should music educators modify their classroom methodology or practices in order to teach visually impaired students? The answers to these questions were vital in identifying current gaps in curricula and addressing ongoing curricular needs of visually impaired graduate music students.

Hypothesis

If an adapted curriculum and pedagogical strategy is suggested, then college music educators would more effectively teach graduate music theory concepts to visually impaired music students.

Definition of Terms

Braille Music Notation – a music notation system designed specifically for visually impaired music students

Disabled – individuals who have mental or physical impairments that may influence their learning needs or style

Inclusive Education – education that includes necessary adaptations or accommodations for students with disabilities

Learning Style – the avenue through which a student learns best; there are four primary learning styles: visual, aural, kinesthetic, and verbal

Pedagogy – the method and practice of teaching academic or praxial concepts

Praxial Learning – an action-based learning approach

Visually Impaired – a broad term used to refer to individuals that are either blind or have limited visual functions

CHAPTER TWO: LITERATURE REVIEW

Teaching Students with Disabilities

In her article, “Teaching is Accommodation: Universally Designing Composition Classrooms and Syllabi,” Anne-Marie Womack explains that disability laws “began affecting American universities in the late twentieth century with Section 504 of the Rehabilitation Act of 1973 and its expansion by the Americans with Disabilities Act [ADA] in 1990.”⁸ She goes on to explain that this legislation helped ensure that students with disabilities could not be discriminated against, based on disability, in the classroom.⁹ The purpose of this legislation was to “level the playing field” between students with disabilities and those without disabilities.¹⁰ While this legislation has been helpful, many students and educators have experienced difficulty in knowing how to understanding each student’s disability and implement reasonable accommodations for learning in the classroom.

The terms *accommodation* or *modification* are often used to refer to “adaptations of the educational environment, the presentation of educational material, the method of response, or the educational content.”¹¹ Testing accommodations are also among the accommodations that students with disabilities may request.¹² The purpose of these accommodations, or modifications,

⁸ Anne-Marie Womack, “Teaching is Accommodation: Universally Designing Composition Classrooms and Syllabi,” *College Composition and Communication* 68, no. 3 (February 2017): 495.

⁹ Womack, “Teaching is Accommodation,” 495.

¹⁰ Judith R. Harrison, Nora Bunford, Steven W. Evans, and Julie Sarno Owens, “Educational Accommodations for Students with Behavioral Challenges: A Systematic Review of the Literature,” *Review of Educational Research* 83, no. 4 (December 2013): 551.

¹¹ Harrison et al., “Educational Accommodations for Students with Behavioral Challenges,” 555.

¹² Benjamin J. Lovett, “Testing Accommodations Under the Amended Americans with Disabilities Act: The Voice of Empirical Research,” *Journal of Disability Policy Studies* 25, no. 2 (September 2014): 81.

is to assist students to learn in a comprehensible way and to absorb the same material as classmates who do not have a disability. These accommodations and adaptations require important consideration, especially when teaching visually impaired students.

Teaching Visually Impaired Students

As an educator, teaching visually impaired students is both a challenging and rewarding experience.¹³ While there can be challenges, it is important for educators to understand the needs of their visually impaired students. While some visually impaired students have learned to become an advocate for themselves in regard to their education, others are looking to the instructor to assist them in learning material efficiently and accurately. While the roles of teacher and confidant are important for educators teaching visually impaired students, it is also important that educators be appropriately trained and educated regarding the unique challenges that visually impaired students face in the classroom.

Challenges of Teaching Visually Impaired Students

Teaching visually impaired students comes with challenges. If the classroom setting has both visually impaired and sighted students, teachers face the task of appropriately contextualizing information for the needs of each audience. Because visually impaired students are unable to see lecture PowerPoints, graphs, charts, or other visual representations used, instructors must adapt their teaching style to fit the needs of visually impaired students. Above

¹³ Janna Saslaw, "Teaching Blind," *Music Theory Online: MTO: A Publication of the Society for Music Theory* 15, no. 3 (August 1, 2009): 5.

all, educators need to be aware of the obstacles students are facing and be equipped to appropriately address those issues.

Importance of the Student-Instructor Relationship in the Classroom

In his article, “Techniques to Enhance Instructors' Teaching Effectiveness with Chemistry Students Who Are Blind or Visually Impaired,” author and chemistry teacher Cary Supalo points out that the student-instructor relationship is a valuable part of the college experience; however, it is “especially important for blind and visually impaired students who need to discuss how the class is going, how material is being presented, and if the students’ learning is occurring at a normal pace.”¹⁴ This relationship “play[s] an important role in figuring out ways to provide accommodations for blind and visually impaired students in the course.”¹⁵ The student-instructor relationship also plays an important role in determining specific accommodations needed in the classroom. Supalo encourages instructors to interface directly with visually impaired students, rather than through the Disabled Student Services (DDS) office, to determine the accommodations necessary.¹⁶ He explains that establishing this relationship builds rapport while encouraging visually impaired students to learn more about themselves and determine what accommodations are needed.¹⁷ Supalo also points out that this increases a

¹⁴ Cary Supalo, “Techniques to Enhance Instructors' Teaching Effectiveness with Chemistry Students Who Are Blind or Visually Impaired,” *Journal of Chemical Education* 82(10) (2005): 1517.

¹⁵ Supalo, “Techniques to Enhance Instructors' Teaching Effectiveness with Chemistry Students Who Are Blind or Visually Impaired,” 1517.

¹⁶ Supalo, “Techniques to Enhance Instructors' Teaching Effectiveness with Chemistry Students Who Are Blind or Visually Impaired,” 1517.

¹⁷ Supalo, “Techniques to Enhance Instructors' Teaching Effectiveness with Chemistry Students Who Are Blind or Visually Impaired,” 1517.

visually impaired student's ability to problem solve when obstacles arise while building a relationship of trust between the instructor and student.¹⁸

Learning Styles of Visually Impaired Students

While it is important for instructors to understand and appropriately adapt curriculum for visually impaired students, it is also important for instructors to have a thorough knowledge of how visually impaired students learn and retain material. Rick Lee Coates, a band instructor at the Governor Morehead School for the Blind in Raleigh, North Carolina, seeks to educate teachers in regard to learning styles of visually impaired students. In his article, "Accommodating Band Students with Visual Impairments," Coates explains that learning and reading styles for visually impaired students often focus on skills of tactual (touch) or auditory learning abilities.¹⁹ He goes on to explain that the Braille system, which involves reading raised patterns presented individually or in combinations, is certainly helpful for visually impaired students seeking to understand print or electronic textbooks, articles, or websites.²⁰ However, Coates emphasizes the need for an auditory emphasis, especially when seeking to teach students how to play an instrument or participate in an ensemble.²¹ The article also highlights the importance of using standard and adaptive technologies in creating accommodations for visually impaired students.²² Coates concludes the article by emphasizing the important role of a band

¹⁸ Supalo, "Techniques to Enhance Instructors' Teaching Effectiveness with Chemistry Students Who Are Blind or Visually Impaired," 1517.

¹⁹ Rick Lee Coates, "Accommodating Band Students with Visual Impairments," *Music Educators Journal* 99, no. 1 (September 2012): 61.

²⁰ Coates, "Accommodating Band Students with Visual Impairments," 61.

²¹ Coates, "Accommodating Band Students with Visual Impairments," 62.

²² Coates, "Accommodating Band Students with Visual Impairments," 63.

instructor in providing appropriate accommodations and modifications to enable visually impaired students demonstrate a high level of independence and accomplish their goals.²³

Visually Impaired Students in the Music Classroom

Even though visually impaired students face many challenges in the music classroom, most often thrive under the appropriate instructor and classroom environment. Many visually impaired students who choose to study music generally excel in this area of study because of the kinesthetic nature of music. Many are also talented musicians and songwriters because of the amount of time and effort they put into their craft. Because of this, important tools have been developed to assist these students as they seek to further their music education and knowledge of music practices.

Braille Music Notation System

The Braille Music System was developed to provide an alternate and easier way for visually impaired music students to “read” written musical symbols and notation. In her article, “Notational Systems and Conceptualizing Music: A Case Study of Print and Braille Music Notation,” Shersten Johnson explains that the Braille music notation is an alphanumeric code that uses configurations of raised dots to indicate which correspond to different music notes and symbols.²⁴ She further explains that, while students learning Braille music do not learn new symbols, the sixty-three combinations of dots in Braille music are simply different combinations

²³ Coates, “Accommodating Band Students with Visual Impairments,” 66.

²⁴ Shersten Johnson, “Notational Systems and Conceptualizing Music: A Case Study of Print and Braille Notation,” *Music Theory Online* 15 (08, 2009): 2.

of symbols already familiar to Braille learners.²⁵ Braille music also does not use staves nor clefs.²⁶ Johnson concludes the article by noting the importance of using Braille music for visually impaired students to properly conceptualize and understand musical concepts; however, she does acknowledge that Braille music does not easily translate to the standard music notation system for non-visually impaired students and teachers.²⁷

Use of Technology in Music Education

Over the last decade, many innovations have significantly improved the lives of disabled people.²⁸ A significant portion of these changes are attributed to advances in technology, assistive devices, and software that empower disabled individuals, including those who are visually impaired, to significantly contribute to society. There has been a significant increase in assistive software available to visually impaired students, such as technologies that are used for audio and tactile transcriptions of print materials.²⁹

Technology Resources for Visually Impaired Students

While Braille music notation can fulfill some of the learning needs of visually impaired music students, it is also imperative that visually impaired musicians are equipped to interact and

²⁵ Johnson, "Notational Systems and Conceptualizing Music," 3.

²⁶ Johnson, "Notational Systems and Conceptualizing Music," 3.

²⁷ Johnson, "Notational Systems and Conceptualizing Music," 6.

²⁸ Marion A Hersh and Michael A. Johnson, *Assistive Technology for Visually Impaired and Blind People*, (London: Springer, 2008), 1.

²⁹ David Keating, *Assistive Technology for Visually Impaired and Blind People*, (London: Springer, 2008), 385.

collaborate with other sighted musicians. In their article “Teaching-Learning Resources and Supports in the Music Classroom: Key Aspects for the Inclusion of Visually Impaired Students,”³⁰ Angela Pino and Laia Viladot address the barriers that still exist between music education and visually impaired students. They list several strategies, materials, and adaptations that teachers can incorporate for the inclusion of visually impaired students in the music classroom. The authors highlight the importance of visually impaired students mastering music notation and having an in-depth understanding of the notation system, as this is the standard form of notation in the music industry.³¹ The article also discusses the importance of teaching blind students to use Braille music notation in addition to the standard music notation system, and assistive technology, such as audio dictation software, in order to maintain independence and autonomy in studying music.³²

To address this issue, many different forms of software have been developed that assist visually impaired students in their quest to understand and interact with written music notation. A notable software that has been developed specifically for visually impaired students is called “Dancing Dots.” The setup of Dancing Dots is similar to that of Finale, Sibelius, or other industry-standard music notation software. However, Dancing Dots has incorporated assistive technology which can audibly describe each action within the software to the user. While this software does not address every specific need of a visually impaired graduate music student, it does give visually impaired students the opportunity to explore and input music into a music

³⁰ Angela Pino and Laia Viladot, “Teaching–Learning Resources and Supports in the Music Classroom: Key Aspects for the Inclusion of Visually Impaired Students,” *British Journal of Visual Impairment* 37, no. 1 (January 2019): 21.

³¹ Pino and Viladot, “Teaching–Learning Resources and Supports in the Music Classroom,” 19.

³² Pino and Viladot, “Teaching–Learning Resources and Supports in the Music Classroom,” 26.

notation software legible to both sighted and visually impaired people. Music Reader, another assistive music notation software, can scan printed scores or sheet music and thus allow a visually impaired student to be able to “read” the score electronically.

Programs and software such as these empower visually impaired musicians to significantly contribute to the field of music. While it helps visually impaired music students produce written music for a variety of settings, it also allows them to contribute to the music industry in various ways. These software programs also allow visually impaired musicians to share their own original compositions with other sighted individuals. While technology has greatly increased the independence of visually impaired students, it does not eliminate the many pedagogical considerations that educators need to evaluate when teaching visually impaired students.

Pedagogical Considerations for Graduate Music Theory

In his book, *Steppingstones to Curriculum: A Biblical Path*, Harro Van Brummelen explains that pedagogy and curriculum are closely intertwined.³³ He further clarifies this statement by explaining that curriculum implementation is ineffective if pedagogy is neglected, but an educator’s decisions about pedagogy will affect the content and structure of the curriculum.³⁴ Thus, pedagogy is an essential element of consideration for educators seeking to make meaningful classroom learning possible.³⁵ Pedagogical strategies are also of utmost

³³ Harro Van Brummelen, *Steppingstones to Curriculum: A Biblical Path*, 2nd ed, (Colorado Springs: Purposeful Design, 2002), 130.

³⁴ Van Brummelen, *Steppingstones to Curriculum*, 130.

³⁵ Van Brummelen, *Steppingstones to Curriculum*, 130.

importance when determining the best way to teach complex concepts to visually impaired students.

In her article, “‘Teaching Blind:’ Methods for Teaching Music Theory to Visually Impaired Students,”³⁶ Loyola University Professor, Jana Saslaw, offers some practical tips and action steps for teaching music theory to visually impaired music students. Saslaw emphasizes that preparation is key when preparing to teach visually impaired music students.³⁷ She also goes on to identify various ways in which a music educator can adapt course assignments or tests to accommodate the needs of visually impaired students such as: having students notate dictations in a music notation software instead of handwriting it; allowing students to play part-writing exercises; and playing analysis exercises on the piano for students to verbally indicate their analysis of the piece.³⁸ These practical tips, and others listed in the article, are certainly helpful for music educators who need advice on how to engage visually impaired students in the music classroom.

Even though teachers should be able to adapt curriculum and pedagogical strategies for visually impaired students, music educators at higher education institutions often lack the training to adapt curriculum for such sophisticated and elaborate concepts.³⁹ As such, it is important for music educators to listen to visually impaired students and anticipate any learning obstacles they may encounter. Another important, yet valuable, resource for music instructors is the interaction with other sighted students in the classroom. As Thomas Oren and Maria McLeod

³⁶ Saslaw, “Teaching Blind,” 2.

³⁷ Saslaw, “Teaching Blind,” 2.

³⁸ Saslaw, “Teaching Blind,” 2.

³⁹ Pino and Viladot, “Teaching–Learning Resources and Supports in the Music Classroom,” 19.

explain, allowing sighted peers to assist visually impaired students with projects or assignments allows the teacher to rely on assistance from sighted students while also creating a sense of camaraderie amongst all students in the classroom.⁴⁰

Even though Braille music can be used in addition to other pedagogical techniques in a graduate music theory course, it is likely that the student will be more successful if they have extensive knowledge of ear training skills.⁴¹ It is also essential that graduate students studying music theory have an in-depth understanding of piano concepts and skills.⁴² Using the piano as an auditory and tactile reference point is essential in teaching music theory to visually impaired students. There are many other ways that music theory curriculum can be adapted for visually impaired students, and many of these avenues are covered in the Curriculum Project in Appendix A.

⁴⁰ Thomas Oren and Maria McLeod, "The Marker is Empty: Lessons Learned from the Student-Teaching Experience of an Individual Who is Visually Impaired," *Journal of Visual Impairment & Blindness* 105, no. 9 (09, 2011): 518.

⁴¹ David Goldstein, "Music Pedagogy for the Blind," *International Journal of Music Education* 35, no. 1 (May 2000): 37.

⁴² Saslaw, "Teaching Blind," 1.

CHAPTER THREE: METHODOLOGY

The research involved in this study, while extensive, specifically served to help in the design and development processes of the curriculum project. After the population of interest for the study was identified, the researcher conducted research to identify what research had been previously conducted on the subject. Using descriptive research, the researcher analyzed case studies to determine disparity in graduate music theory curriculum for visually impaired music students. Once disparities in current curricula were identified, the Curriculum Project in Appendix A was developed to address these curricular needs.

Emerging Themes

Because the Americans with Disabilities Act⁴³ requires higher education institutions to provide the same level of education to students with disabilities and those without disabilities, these institutions often struggle with how to provide this level of education, especially in the music classroom. J. Jerald Inico and Dr. T. Edwin Prabakaran explain that higher education institutions have the great responsibility of delivering necessary content in a format that is understandable for students.⁴⁴ Additionally, they assert that students with disabilities “have the right to expect the same standard of education as their schoolmates.”⁴⁵

⁴³ J. Jerald Inico and T. Edwin Prabakaran, “An Empirical Study on the Experiences of the Visually-Impaired Students of Loyola College with ICT Support on Using www.Loyolacollege.edu,” *International Journal of Advanced Research in Computer Science* 9, no. 1 (01, 2018), 578.

⁴⁴ Inico and Prabakaran, “An Empirical Study on the Experiences of the Visually-Impaired Students of Loyola College with ICT Support on Using www.Loyolacollege.edu,” 578.

⁴⁵ Inico and Prabakaran, “An Empirical Study on the Experiences of the Visually-Impaired Students of Loyola College with ICT Support on Using www.Loyolacollege.edu,” 578.

Due to this pressure, many higher education institutions do not have disability-centered curricula. A study published in the *British Journal of Visual Impairment*⁴⁶ discusses the visually impaired curricula designed for higher education institutions. The article points out that many universities are not anticipating the enrollment of students with disabilities, and instead are trying to accommodate their students' disabilities after they have enrolled.⁴⁷ Because there are gaps in higher education curricula, especially in graduate music courses, the development of appropriate curricula is needed.

Design

This curriculum development study was designed around background research and different pedagogical aspects. The course detailed in Appendix A is designed to be implemented over a 12-week semester with space for adjustment in the presentation of the curriculum if necessary. Because visually impaired students learn differently, it is important that the curriculum be flexible and easily adaptable to the specific needs of the student population. In designing and creating the curriculum, the ADDIE model of curriculum development for praxial learning was the primary framework for creating the course.

The ADDIE Model of Curriculum Development

⁴⁶ John TE Richardson, "Academic Attainment in Visually Impaired Students in Distance Education," *British Journal of Visual Impairment* 33, no. 2 (May 2015): 136.

⁴⁷ Richardson, "Academic Attainment in Visually Impaired Students in Distance Education," 136.

The ADDIE instructional design model for curriculum development consists of five different phases: Analysis, Design, Development, Implementation, and Evaluation.⁴⁸ This model describes a process applied to instructional design for generating episodes of intentional learning.⁴⁹ The purpose of this instructional model is to provide instruction that is more efficient, effective, and relevant than less rigorous instructional approaches.⁵⁰ The ADDIE model was designed to assist educators in creating effective, and easily assessable, curriculum.

The purpose of the Analysis phase of the ADDIE model is to determine and address any “probable causes for a performance gap.”⁵¹ The sequence and scope of the course can also be preliminarily determined during this stage of the model. During this phase of the model, learning outcomes are identified and the potential audience is determined.⁵² This phase also includes identifying potential resources for delivery of the curriculum.⁵³ This phase could also include constructing a syllabus with information about course assignments, policies, and procedures.

The Design phase of the ADDIE model is to identify appropriate testing methods.⁵⁴ Procedures associated with this phase include: conducting a task inventory, composing

⁴⁸ Michael Molenda, “In Search of the Elusive ADDIE Model,” *Performance Improvement* 54, no. 2 (February 2015): 40.

⁴⁹ Robert Maribe Branch, *Instructional Design: The ADDIE Approach*, 1st ed, (London; New York: Springer, 2010), 17.

³ Torrey Trust and Emrah Pektas, “Using the ADDIE Model and Universal Design for Learning Principles to Develop an Open Online Course for Teacher Professional Development,” *Journal of Digital Learning in Teacher Education* 2018, 34:4, 223.

⁵¹ Branch, *Instructional Design*, 17.

⁵² Branch, *Instructional Design*, 17.

⁵³ Branch, *Instructional Design*, 17.

⁵⁴ Branch, *Instructional Design*, 17.

performance objectives, generating testing strategies, and calculating return on investment.⁵⁵

This phase provides an opportunity for the instructor to consider course content and activities as well as determine the formative and summative assessments to be used throughout the course.

Because course content should be sequenced from easiest to most difficult throughout the progression of the course, it is important for the instructor to consider the course sequence when creating course content and activities.

The purpose of the Development phase is to generate and validate learning resources applicable to the instructional modules while preparing instructional strategies for each unit.⁵⁶ These procedures include generating instructional materials and content while preparing students to link what they know to what they do not know.⁵⁷ The Development phase provides the opportunity for the instructor to consider teaching strategies and develop a comprehensive set of learning resources, including any visuals or graphics needed for the course.

The Implementation phase of the ADDIE instructional design model prepares the learning environment and engages students.⁵⁸ This phase is the implementation of all learning resources and strategies developed from previous stages of the model. The Implementation phase is the stage of the model in which students interact with the created curriculum. During this phase, it is also important to identify any physical items or tasks needed for implementing the curriculum. The details of the implementation of formative and summative assessments will also need to be considered at this stage of the model.

⁵⁵ Branch, *Instructional Design*, 17-18.

⁵⁶ Branch, *Instructional Design*, 18.

⁵⁷ Branch, *Instructional Design*, 18.

⁵⁸ Branch, *Instructional Design*, 18.

Finally, the Evaluation phase serves as an end to the model. The purpose of this phase is to assess the quality of the instructional processes and products before and after implementation.⁵⁹ Aspects of this final phase include determining the evaluation criteria for the entire ADDIE process, selecting or creating all the evaluation tools for the process, and conducting evaluations.⁶⁰ A purpose of this phase is also to identify any issues with the curriculum that might need revisions for greater effectiveness. This is the final phase of the model and completes the ADDIE model for curriculum development.

For each element of design in the ADDIE model, a corresponding chart was created in the development of the MUSC 500 course, Graduate Music Theory for the Visually Impaired Music Student, course. Each of the charts included in Appendix A are as follows: a course syllabus, an analysis chart, a design chart, a development chart, an implementation chart, and an evaluation chart were all included in this study. These charts were created for the Liberty University's MUSC 670 course, Principles of Curricula and Pedagogy for Music Education, and were utilized in the creation of MUSC 500.

Additional Elements of Curricular Design

While the development of the curriculum primarily utilized the ADDIE model, many of the major concepts covered in the course are modeled from concepts used in Liberty University's course, MUSC 524, "Analytical Techniques,"⁶¹ and is a required course for all students enrolled

⁵⁹ Branch, *Instructional Design*, 18.

⁶⁰ Branch, *Instructional Design*, 18.

⁶¹ The following is the course description for Liberty University's course, MUSC 524, taken directly from the online course catalog, <https://catalog.liberty.edu/course-search/>

MUSC 524 - Analytical Techniques (3 hours) Prerequisite: Students must successfully complete the Graduate Music Theory This course is a foundational course for graduate contemporary music theory practices. Systematic and

in Liberty's graduate music programs. Because the created curriculum, MUSC 500 Graduate Music Theory for the Visually Impaired Music Student, is designed to be taught alongside a course of similar complexity, it was important for the curriculum to be immediately implementable in a graduate school classroom setting.

empirical investigations into formal and compositional procedures of selected masterworks from the tonal repertoire. The study includes a thorough investigation of jazz and extended harmonies used in contemporary popular music. Students continue to learn and apply analytical technique to various music styles. Melodic concepts and music form are explored in the literature from historical music periods and compared to present popular music literature and practice. Lectures lead to individual analytical projects. Principles of harmonic function are taught and applied to representative historical and popular music forms.

CHAPTER FOUR: RESEARCH FINDINGS: DESCRIPTION OF THE CURRICULUM

As Harro Van Brummelen discusses in his book, *Steppingstones to Curriculum*, educators wield much power in deciding their pedagogy, content choice, activities, and resources.⁶² Even though teachers often have much freedom in determining their course content and approaches to the content, an important role of the educator is being sensitive to the needs of their students and classes.⁶³ Educators play a vital role in educating students while facilitating a learning environment where students have the freedom to make mistakes, ask questions, and deepen their knowledge about the given topic. Because educators hold such an important role in leading and shaping their classroom environment and curriculum, studying inclusive education and the role of the graduate Music Theory educator was a major focus of this project.

Research Results

Because providing quality education to *all* students is the desire of most educators, many teachers seek to provide a supportive classroom environment where students can learn and grow in their knowledge and understanding of varying topics. However, for students with disabilities, having a positive learning environment is often essential for growth. In their article, “Inclusive Education: Perception of Visually Impaired Students, Students Without Disability, and Teachers in Ghana,” authors Edward Asamoah, Kwadwo Ofori-Dua, Ebenezer Cudjoe, Alhassan Abdullah, and Joy Ato Nyarko address the importance of inclusive education for students with disabilities. They define a hallmark of inclusive education as “providing all students ... with high-quality instructions, intervention, and support.”⁶⁴ They go on to explain that inclusive

⁶² Van Brummelen, *Steppingstones to Curriculum*, 138.

⁶³ Van Brummelen, *Steppingstones to Curriculum*, 138.

⁶⁴ Edward Asamoah, Kwadwo Ofori-Dua, Ebenezer Cudjoe, Alhassan Abdullah, and Joy Ato Nyarko, “Inclusive Education: Perception of Visually Impaired Students, Students Without Disability, and Teachers in Ghana,” *SAGE Open*, (October 2018): 1.

schools “have a collaborative and respectful school culture where students with disabilities are presumed to be competent, develop positive social relationships with peers, and are full participating members of the school community.”⁶⁵ Inclusive education also helps build the gap between students with disabilities and those without disabilities.⁶⁶ While inclusive education is important, teachers are the essential element to successful inclusive education. Even though many teachers may have a desire to implement it and welcome visually impaired students into their classroom, many educators are unprepared or unequipped to effectively include all students in the learning environment.

Lack of Training for Music Educators

Research proves that increased training and peer support strategies significantly influence teacher’s perceptions and the “ability to foster the inclusion of visually impaired students” in the classroom.⁶⁷ Studies have proven that additional training is needed for teachers who “lack the requisite knowledge and skills to meet the instructional needs of their diverse learners.”⁶⁸ However, studies have also shown that teacher training is directly related to teacher perception or attitude toward inclusive education. In their study, John Ravenscroft, John Davis, Mert Bilgin, and Kerry Wazni concluded that a key barrier to inclusion stems from teachers feeling

⁶⁵ Asamoah et al., “Inclusive Education,” 1.

⁶⁶ Asamoah et al., “Inclusive Education,” 5.

⁶⁷ John Ravenscroft, John Davis, Mert Bilgin, and Kerry Wazni, “Factors that Influence Elementary School Teachers’ Attitudes Towards Inclusion of Visually Impaired Children in Turkey,” *Disability & Society* 34, no. 4 (2019): 648.

⁶⁸ Paul M. Ajuwon, Kalene Meeks Melanie, Nora Griffin-Shirley, and Phoebe A. Okungu, “Reflections of Teachers of Visually Impaired Students on their Assistive Technology Competencies,” *Journal of Visual Impairment & Blindness (Online)* 110, no. 2 (Mar, 2016): 128.

unprepared to teach visually impaired students.⁶⁹ Additionally, the attitude and perception of teachers toward visually impaired students often correlates directly to the teacher's feeling of adequacy to teach this unique population.

Importance of Training on Perception and Attitude of Educators

The positive attitude of an educator is an essential element to a successful classroom environment. Educators who believe in their students and encourage students to do their best set the tone for their classroom. Research has proven that expectations of teachers in the classroom influence the achievements, behavior, and self-esteem of students.⁷⁰ This is especially true for many visually impaired students who already feel like they are at a disadvantage compared to their sighted peers.

Research completed by Edward Asamoah, Kwadwo Ofori-Dua, Ebenezer Cudjoe, Alhassan Abdullah, and Joy Ato Nyarko suggested that most teachers support inclusive education and incorporating students with visual impairments into the classroom; however, others feel that it slows the progress of the entire class.⁷¹ However, many educators have acknowledged the positive benefits of inclusive education for students with visual impairments.⁷² It is also important to note that teachers who have had more special education coursework

⁶⁹ Ravenscroft et al., "Factors that Influence Elementary School Teachers' Attitudes Towards Inclusion of Visually Impaired Children in Turkey," 629.

⁷⁰ Paul M. Ajuwon, Huda Sarraj, Nora Griffin-Shirley, DeAnn Lechtenberger, and Li Zhou, "Including Students Who Are Visually Impaired in the Classroom: Attitudes of Preservice Teachers," *Journal of Visual Impairment & Blindness (Online)* 109, no. 2 (Mar, 2015): 131.

⁷¹ Asamoah et al., "Inclusive Education: Perception of Visually Impaired Students, Students Without Disability, and Teachers in Ghana," 7.

⁷² Ravenscroft et al., "Factors that Influence Elementary School Teachers' Attitudes Towards Inclusion of Visually Impaired Children in Turkey," 648.

generally have a more positive perception of inclusion versus teachers with less specific training or coursework.⁷³

Performance of Visually Impaired Students in the Classroom

In the research conducted for this study, it is evident that many scholars have reported that, with the appropriate accommodation in place, visually impaired students are just as likely to be successful as their non-disabled peers.⁷⁴ It is important for educators to know how to equip their students for successful completion of the course. Research has proven that some of the necessary accommodations for visually impaired music students include an emphasis on aural and kinesthetic experiences rather than visual experiences.⁷⁵

Curriculum Overview

Course Format

This curriculum, MUSC 500 Graduate Music Theory for the Visually Impaired Music Student, was developed as a 12-week residential course. Because of the praxial nature of the course material, the course must be completed in a residential format in order for students to gain the full spectrum of concepts and assignments. Additionally, the course is designed to be taught alongside, or concurrently, with a similar course for sighted students. The purpose of teaching the course concurrently with a similar graduate music theory course is to allow for collaborative assignments amongst visually impaired and sighted peers. This releases the instructor from

⁷³ Ajuwon et al., “Including Students Who Are Visually Impaired in the Classroom,” 131.

⁷⁴ Richardson, “Academic Attainment in Visually Impaired Students in Distance Education,” 135.

⁷⁵ Saslaw, “Teaching Blind,” 2-3.

having to explain visual aspects of music notation in extreme detail to each student and also allows sighted peers to interact with, and assist, their visually impaired peers.

While many music educators often have formal training to learn how to teach to different learning styles, visually impaired learners present a unique challenge for educators, especially in graduate studies courses. This course is designed to address the curriculum and pedagogical adaptations needed for visually impaired students, and to provide a practical resource for music educators teaching graduate-level Music Theory courses.

Curriculum Approach

When approaching the design and development of this curriculum project, the Braille music notation system needed to be considered and evaluated for effectiveness. While some music educators argue for the importance of this tool in teaching music concepts to visually impaired students, it is fairly ineffective for teaching graduate Music Theory concepts. Because Braille music notation system is not understood by many sighted musicians, it can be a barrier for visually impaired students seeking to collaborate with sighted musicians. It can also be a barrier for visually impaired students seeking to further their music knowledge beyond elementary concepts.

By starting with basic visual aspects of music, the MUSC 500 course seeks to strengthen students' understanding of foundational Music Theory concepts. By teaching visually impaired students the visual elements of music without the use of the Braille music notation system, they would be better equipped to study complex music theory concepts that are essentially unexplainable in the Braille notation system. Because of this unique approach, this course also

utilizes specific teaching methods to ensure that students have a sound understanding of basic music concepts before moving to more complex concepts.

Teaching Methods

The primary instructive technique for this course includes the use of the piano. Because visually impaired students are unable to see concepts that may otherwise be explained through written means, whether on staff paper or a white board in the classroom, the piano would be an important teaching tool for success in teaching the course content. The piano provides both an auditory and kinesthetic frame of reference for visually impaired students and is utilized throughout the course for varying assignments, including the Part-Writing Project and analysis assignments.

This course also utilizes available technology and software for further accessibility. Because visually impaired students are unable to physically notate music on staff paper, this course requires the use of Dancing Dots. Much like the Finale music notation software, Dancing Dots allows students to input their assignments into the program and have playback and printing functionalities. This software is required for the final Rhythm Chart Project⁷⁶ so that students achieve a familiarity with the software and acquire useful and marketable skills for future opportunities.

Curriculum Accommodations

Because visual aids, or course elements that contain visual aspects, are ineffective in teaching visually impaired students, it is important that music educators are able to appropriately

⁷⁶ A graphical description of the Rhythm Chart Project can be found on page 57 of the Curriculum Project in Appendix A.

adapt their curriculum to accommodate visually impaired students in the classroom. Because educators are unable to use charts, graphs, or other visual elements to teach curriculum to visually impaired students, music educators are often required to think outside of the box to determine necessary accommodations for these students. However, in determining these necessary accommodations or adaptations to the curriculum being used, it is important to include the student(s) in this process.

Involving students in curriculum planning is an important element of determining needed accommodations for students with disabilities; however, this also allows students to “take ownership of their learning and encourages them to become responsible.”⁷⁷ Oftentimes, by having an open conversation with visually impaired students, they are more likely to share the challenges they face in everyday life while also giving the veteran educator a glimpse into the struggles they may face in the classroom. The ultimate goal in assisting visually impaired students, especially at the graduate level, is to allow them to become more insightful, capable, and responsible persons in regards to their education and learning style(s).⁷⁸

Course Content

While the course contains a lot of traditional elements of graduate Music Theory courses, the curriculum also addresses the specific pedagogical considerations needed when teaching visually impaired students. Because the course content is primarily the content used in Liberty University’s MUSC 524 Analytical Techniques course, this course has been designed to run simultaneously with a similar course but with adaptations for visually impaired students.

⁷⁷ Van Brummelen, *Steppingstones to Curriculum*, 140.

⁷⁸ Van Brummelen, *Steppingstones to Curriculum*, 138.

Pre-Requisites

Because the MUSC 500 course, Graduate Music Theory for the Visually Impaired Music Student, contains graduate-level music theory concepts, there are certain pre-requisites that the students must fulfill before taking the course. Because this course tackles complex concepts and requires students to have a proficient knowledge of music theory, an undergraduate music degree (or equivalent music theory knowledge) is a requirement for the course. This ensures that students have a working knowledge of theory concepts needed for undergraduate music studies and ensures that they approach this course with a foundational knowledge upon which to build the knowledge gained through this course.

Another important pre-requisite for MUSC 500 is a basic ability of piano skills. Since visually impaired students are unable to see graphs, charts, or other visual aids that an instructor might use to teach music theory, this course heavily utilizes the piano as an auditory basis for music theory concepts. Students also need to have sufficient piano skills in order to be able to play their part-writing assignment, instead of physically notating it on staff paper for the instructor to evaluate. Additionally, students should also have prior familiarity with the Dancing Dots software in order to be able to effectively input assignments and produce a visually detailed rhythm chart.

III. PREREQUISITES

- A. Undergraduate Music Degree OR extensive Music Theory knowledge
- B. Basic piano knowledge and skills
- C. Familiarity with Dancing Dots music notation software

Figure 1: List of Pre-Requisites from MUSC 500 syllabus, Appendix A.

Required Learning Materials

Because of the unique learners for which this course was designed, the learning materials required for the course uniquely address the needs of visually impaired students in the classroom. While most graduate-level visually impaired music students should be familiar with these learning materials, it is imperative that each student obtain these resources for success in the class.

VIII. REQUIRED RESOURCE PURCHASE(S)

- A. Stein, Deborah J. *Engaging Music: Essays in Music Analysis*. New York: Oxford University Press, 2005. (eBook)
- B. Laitz, Steven G. (Steven Geoffrey), and Bartlette, Christopher A. *Graduate Review of Tonal Theory: A Recasting of Common-Practice Harmony, Form, and Counterpoint*. New York: Oxford University Press, 2010. (eBook)
- C. Dancing Dots Music Technology software

IX. ADDITIONAL MATERIALS FOR LEARNING

- A. Computer with basic audio/visual output equipment and Braille or audio software
- B. Internet access
- C. Microsoft Office
- D. Recording device

Figure 2: List of Required Resources and Additional Learning Materials from MUSC 500 syllabus, Appendix A.

Dancing Dots has audio and dictation capabilities, through which students are able to easily notate music for assignments and other purposes. It is also compatible with Finale files, which can be converted and imported into the software. Even though Dancing Dots is still being improved, its basic capabilities are helpful for visually impaired learners as they seek to digitalize written music and complete homework assignments.

Learning Outcomes

A challenging aspect of teaching visually impaired students is teaching the material needed for the course while using teaching methods that are applicable and understandable for visually impaired students. Aspects of course content, such as learning outcomes, often have to be adapted to fit the needs of visually impaired students while appropriately addressing the content of a graduate level course. This can be a challenging task for educators who have never encountered a visually impaired student in their classroom. However, with adapted learning outcomes and approaches, the same content can be covered; but, it may be covered at a different pace or through different avenues than other traditional courses. The following learning outcomes have been developed to cover basic music theory concepts to ensure students have a strong foundation of these concepts before moving to more complex concepts.

Learning Outcomes At the end of the course, the student will be able to:
1. Describe the visual aspects of a musical staff, note heads, note value, key signatures, and chord structures.
2. Recognize Jazz and extended harmonies in various styles of music including Bach chorales and contemporary musical selections.
3. Analyze music, including musical form.
4. Create advanced and visually detailed lead charts for worship leading.
5. Evaluate advanced harmonic progressions using traditional and non-traditional techniques.

Figure 3: Learning Outcomes chart from MUSC 500 Curriculum Project, Appendix A.

Course Requirements and Assignments

Visually impaired students have a unique framework for understanding material and completing assignments. Because this course intends to cover graduate music theory concepts and provide a foundational understanding of the basic visual aspects of music theory notation, a lot of material is covered throughout the 12-week course. The course requirements and assignments have been designed with the specific accommodations needed for visually impaired students while not compromising the complexity of concepts.

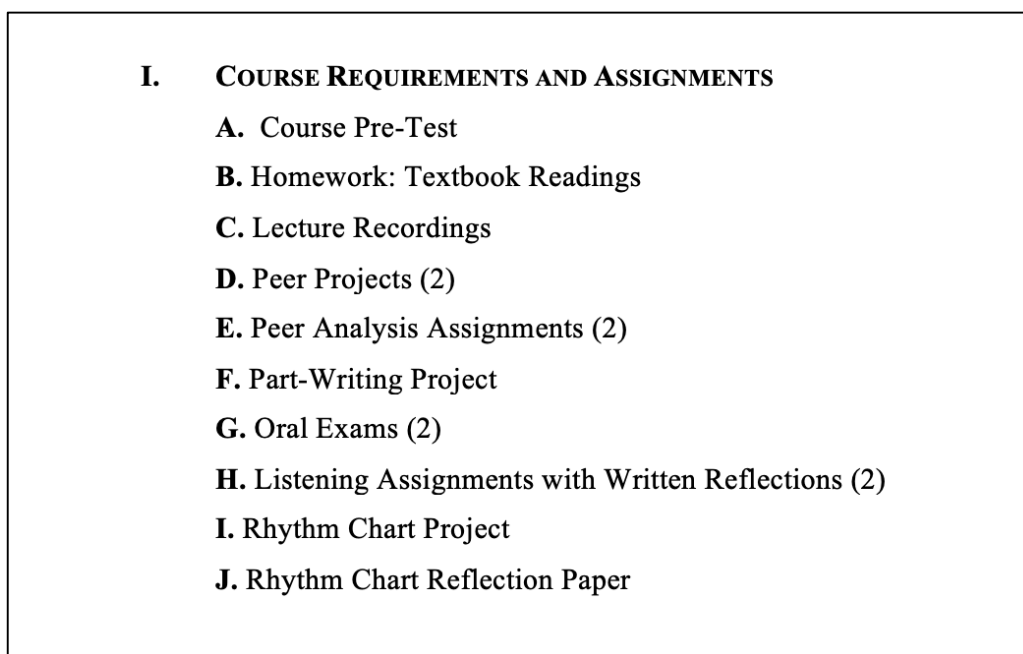
- 
- I. COURSE REQUIREMENTS AND ASSIGNMENTS**
 - A. Course Pre-Test**
 - B. Homework: Textbook Readings**
 - C. Lecture Recordings**
 - D. Peer Projects (2)**
 - E. Peer Analysis Assignments (2)**
 - F. Part-Writing Project**
 - G. Oral Exams (2)**
 - H. Listening Assignments with Written Reflections (2)**
 - I. Rhythm Chart Project**
 - J. Rhythm Chart Reflection Paper**

Figure 4: List of Course Requirements and Assignments from MUSC 500 syllabus, Appendix A.

While extensive, these assignments seek to provide the student with a thorough understanding of graduate music theory concepts by ensuring that they are able to complete assignments and projects to demonstrate understanding of the material. These assignments, some more robust than others, allow the student various opportunities to collaborate with sighted peers while solidifying their understanding of these complex concepts.

CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS

Summary of Study

This study was conducted to determine what, if any, curriculum exists to aid music educators in teaching graduate music theory concepts to visually impaired music students. The study was conducted using research previously conducted by scholars and observations from the researcher's experience in Liberty University's MUSC 524, Analytical Techniques, course. The written portion of the study seeks to provide the research and scholarly support to substantiate the need for graduate Music Theory curriculum for visually impaired students. It also seeks to stimulate the interest of the reader and provide further insight into everyday challenges that visually impaired students face in the music classroom.

The Curriculum Project provides a practical resource for graduate music theory instructors. The purpose of the curriculum is to provide a framework for educators seeking to provide inclusive education to visually impaired students at the graduate level.

Summary of Purpose

The study was designed to provide practical resources and a curriculum for music educators who instruct visually impaired students in a graduate music theory course. This curriculum also aims to equip instructors with resources for teaching visually impaired graduate music students.

Summary of Procedure

Because there is limited research currently available on the topic, scholarly research from the fields of computer science, college composition and communication, and chemical education

that directly related to visually impaired students was incorporated. While there is much research regarding visually impaired students in education, little research has been conducted regarding visually impaired students in the collegiate music setting – especially at the graduate level. However, much of the research from these studies was effective in substantiating the specific objectives and purposes of this project. This research was found through scholarly articles and books that were accessed through Liberty University’s Jerry Falwell Library.

In developing the Curriculum Project, the ADDIE model was utilized to structure the course, MUSC 500. An analysis chart, design chart, development chart, implantation chart, and evaluation chart were all used in developing, designing, and evaluating the effectiveness of the course. These charts were used to develop the details of each aspect of the course while providing oversight into the overall goals of the developed curriculum. These completed charts can be found in Appendix A of this project.

Summary of Findings and Prior Research

Because higher education institutions may not anticipate enrollment of visually impaired students, and must establish accommodations after students have enrolled in courses, many music educators may be unprepared to teach in a way that meets the needs of this specific population. Many educators’ perceptions of inclusive education and special needs accommodations are also directly related to their training, or lack of training, and their perceived ability to adequately teach this specific population of students.

Limitations

While there are many limitations that influenced this study, the study was not conducted with the intention of addressing every existing gap in music theory pedagogy for the visually

impaired. Additionally, since each university teaches different curricula and has varying pedagogy, and due to the large amount of graduate music programs in the country, it is impractical to attempt to study all of them. These limitations, while extensive, also provide the framework for further research to be completed on this topic.

Recommendations for Future Study

Because there is limited research that has been conducted regarding graduate music theory curricula for the visually impaired, it would be beneficial for a study to be conducted of graduate music theory courses. Analyzing each course curriculum, as well as conducting interviews and surveys to determine how it is used, would be helpful in the further study of this topic. In these surveys and interviews, the researcher could question if, and/or how, these institutions adapt curriculum or provide accommodations for students with visual impairments in these courses.

Another recommendation for further study would be to conduct a survey or interviews of visually impaired graduate music students who have taken, or are taking, graduate music theory courses. The purpose of this study would be to identify student perspectives to determine what, if any, vital elements are not currently being considered by educators when developing curriculum for visually impaired students. Additionally, it would be advantageous to further identify any gaps in curriculum or pedagogy that should be addressed to enhance this specific population's understanding of graduate music theory concepts.

Implications for Practice

There is a growing need for educators to be competent in how to adapt curriculum for visually impaired students, especially in graduate music courses. Currently, there is an entire population of students who may not be receiving a quality education at the graduate school level because universities are ill-prepared or equipped to reach them. By creating curricula that addresses the specific needs of visually impaired students, universities could be more prepared to educate and equip their teaching staff to modify their lessons accordingly. Additionally, another important benefit of adapting graduate music theory would be for the university to market their modified curricula to visually impaired music students seeking further education. If a university is sufficiently equipped with special needs modifications, visually impaired musicians may have more incentive to continue their studies at that institution. It could also potentially increase higher enrollment in graduate music programs overall.

Curriculum Project Summary

The Curriculum Project, MUSC 500, “Graduate Music Theory for the Visually Impaired Music Student,” was created to fill a gap in existing graduate music curricula to assist in teaching visually impaired students. The entire framework for the curriculum is included in Appendix A of this project. Due to the praxial nature of the 12-week course and the extensive course assignments, the course was created to be taught concurrently with a similar graduate music theory course. The course utilizes the piano and other kinesthetic teaching tools which necessitates the course being taught residually in its current format. While it could be adapted for online education, a main purpose of the course is to have visually impaired and sighted graduate musicians interact with one another and complete assignments together, throughout the

duration of the semester. This collaborative approach to graduate music theory is one of the trademark aspects of this Curriculum Project and would be a unique way to reach the specific target audience.

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COURSE SYLLABUS

NAME OF COURSE: MUSC 500 - GRADUATE MUSIC THEORY FOR THE VISUALLY IMPAIRED MUSIC STUDENT

Course Description

This course will approach graduate music theory through the lens of visually impaired music students. This discussion-based course will require students to verbally describe graduate music theory concepts and apply these concepts through the given assignments. Students will also use the piano as a reference for understanding, playing, and creating assignments throughout the course. Through lectures, the instructor will give verbal description of visual aspects of assignments in a way that visually impaired students are able to understand. The course is designed to be taught alongside another graduate music theory course with similar curricula and pedagogy for peer interaction with non-visually impaired graduate music students. Visually impaired students will be paired with sighted students throughout the course to complete course assignments and peer group projects. By the end of the course, students will be able to verbally describe the visual aspects of musical notation and create their own advanced rhythm chart using the Dancing Dots music notation software.

Rationale

The purpose of the course is to teach graduate music theory in a way that visually impaired music students can comprehend. Because visually impaired students require unique teaching strategies and approaches, this course is specifically designed for visually impaired students wanting to further their music education through graduate music studies. Because the course is designed to be taught alongside another graduate music theory course with similar curricula and pedagogy, visually impaired students will have the opportunity to interact with sighted graduate music students studying the same material. The aim for this course is to teach visually impaired graduate students musical concepts in a way that is understandable and comprehensible for their unique framework.

I. PREREQUISITES

- A. Undergraduate Music Degree OR extensive Music Theory knowledge
- B. Basic piano knowledge and skills
- C. Familiarity with Dancing Dots music notation software

II. REQUIRED RESOURCE PURCHASE(S)

- A. Stein, Deborah J. *Engaging Music: Essays in Music Analysis*. New York: Oxford University Press, 2005. (eBook)
- B. Laitz, Steven G. (Steven Geoffrey), and Bartlette, Christopher A. *Graduate Review of Tonal Theory: A Recasting of Common-Practice Harmony, Form, and Counterpoint*. New York: Oxford University Press, 2010. (eBook)

- C. Dancing Dots Music Technology software

III. ADDITIONAL MATERIALS FOR LEARNING

- A. Computer with basic audio/visual output equipment and Braille or audio software
- B. Internet access
- C. Microsoft Office
- D. Recording device

IV. MEASURABLE LEARNING OUTCOMES

Upon successful completion of this course, the student will be able to:

- A. Describe the visual aspects of a musical staff, note heads, note value, key signatures, and chord structures.
- B. Recognize Jazz and extended harmonies in various styles of music including Bach chorales and contemporary musical selections.
- C. Demonstrate musical analysis skills including identifying musical form.
- D. Create advanced and visually detailed lead charts for worship leading.
- E. Evaluate advanced harmonic progressions using traditional and non-traditional techniques.

V. COURSE REQUIREMENTS AND ASSIGNMENTS

- A. Course Pre-Test
- B. Homework: Textbook Readings
- C. Lecture Recordings
- D. Peer Projects (2)
- E. Peer Analysis Assignments (2)
- F. Part-Writing Project
- G. Oral Exams (2)
- H. Listening Assignments with Written Reflections (2)
- I. Rhythm Chart Project
- J. Rhythm Chart Reflection Paper

VI. COURSE GRADING AND POLICIES

- A. Points
- | | |
|-------------------------------------|----|
| Course Pre-Test | 25 |
| Homework: Textbook Readings | 25 |
| Lecture Recordings/Attendance | 25 |
| Peer Projects (2 at 25 points each) | 50 |

Part-Writing Project	75
Peer Analysis Assignments (2 at 75 points each)	150
Oral Exams (2 at 50 points each)	200
Listening Assignments with Written Reflections (2 at 50 points each)	100
Rhythm Chart Project	300
Rhythm Chart Reflection Paper	50
Total	1000

B. Scale

A = 940–1010 A- = 920–939 B+ = 900–919 B = 860–899 B- = 840–859
C+ = 820–839 C = 780–819 C- = 760–779 D+ = 740–759 D = 700–739
D- = 680–699 F = 0–679

C. Late Assignment Policy

Course assignments should be submitted on time. If students are unable to complete an assignment on time, the student must contact the instructor by email immediately. Late assignments will only be accepted up to a week after the due date and at the discretion of the instructor. *Late submissions of the Rhythm Chart Project will not be accepted.*

CURRICULUM PROJECT – ANALYSIS CHART

Student: Moriah Wilson	Course for which you are creating curriculum: MUSC 500 Graduate Music Theory for the Visually Impaired Music Student - RESIDENTIAL
Required Textbook for Class (at least two textbooks should be entered with complete information in Turabian style): Stein, Deborah J. <i>Engaging Music: Essays in Music Analysis</i> . New York: Oxford University Press, 2005. (eBook) Laitz, Steven G. (Steven Geoffrey), and Bartlette, Christopher A. <i>Graduate Review of Tonal Theory: A Recasting of Common-Practice Harmony, Form, and Counterpoint</i> . New York: Oxford University Press, 2010. (eBook)	
Additional Resources: Dancing Dots Music Technology software	
Identify the problem: <i>(What does the student not know how to do? What is the student's gap in the training or experience?)</i>	
Visually impaired graduate music students need to be able to learn graduate music theory concepts in a way that is understandable and comprehensible to their unique perspective.	
Who are the learners and what are their characteristics? <i>(Age, major, pre-requisites, residential, online, or a hybrid of the two)</i>	
Visually impaired graduate music students, with an undergraduate degree in music, studying graduate music theory in a residential format. Must have an undergraduate degree in music or extensive knowledge of music theory practices. Must have some piano ability and have regular access to a computer.	
What is the new desired behavior? <i>(Overall, what is the main change or new addition to the student's demonstrated ability?)</i>	
The student will be able to comprehend, analyze, and evaluate written and complex graduate music theory concepts.	
What are the delivery options? <i>(Explain the materials you will develop for the course.)</i>	
This course is residential and meets on Mondays, Wednesdays, and Fridays for 90 minutes with a 10 minute break halfway through the class period.	
What are the pedagogical considerations? <i>(Describe your general content and methodology for the course.)</i>	
This course relies on verbal description and the piano to explain and introduce concepts for visually impaired students.	
What learning theory applies to your curriculum? Why?	

Cognitive load theory is considered for this course because visually impaired students can have difficulty understanding and processing a lot of information at once. Concepts will be broken down into manageable segments with constant questions for comprehension throughout each lecture. Each class meets for 90 minutes, with a 10 minute break halfway through, in order to sufficiently teach the material but not overwhelm the student.

<p style="text-align: center;">Learning Outcomes</p> <p style="text-align: center;">At the end of the course, the student will be able to:</p>	
1. Describe the visual aspects of a musical staff, note heads, note value, key signatures, and chord structures.	
2. Recognize Jazz and extended harmonies in various styles of music including Bach chorales and contemporary musical selections.	
3. Analyze music, including musical form.	
4. Create advanced and visually detailed lead charts for worship leading.	
5. Evaluate advanced harmonic progressions using traditional and non-traditional techniques.	

CURRICULUM PROJECT – DESIGN CHART

Student: Moriah Wilson		Course for which you are creating curriculum: MUSC 500 Graduate Music Theory for the Visually Impaired Music Student - RESIDENTIAL	
Concept Statement: <i>(Briefly describe the overall purpose and point of the instructional unit.)</i>			
Learning Outcomes <i>(List in the order you plan to address in 12 weeks)</i>	Content <i>(What must be learned to reach this objective?)</i>	Learning/Training Activity <i>(How will you teach the content?)</i>	Assessment <i>(How will you know that the student has met the objective?)</i>
1. Describe the visual aspects of a musical staff, note heads, note value, key signatures, and chord structures.	Week 1: <ul style="list-style-type: none"> • Recognize the visual aspects of a staff: 5 horizontal lines, 4 spaces, treble and bass clefs, measures, formatting on the page, etc. • Review note values and discuss visual aspects of note heads (stems up or down, note heads filled in or empty, etc.) • Discuss key signatures and visual aspects of key signatures on the page (sharp and flat signs, placement of these symbols, and additional musical symbols, dynamics, etc.) • Discuss music notation styles 	Week 1: <ul style="list-style-type: none"> • Musical Staff discussion activity: in peer groups, discuss salient visual features of a musical staff, note values, measures, key signatures, and additional musical symbols) • Listen to examples of quarter, whole, and half notes played on the piano and identify each type of given note 	Week 1: <ul style="list-style-type: none"> • Formative assessment: observations during peer discussion activity

	<p>(rhythm and slash notation)</p> <p>Week 2:</p> <ul style="list-style-type: none"> • Review intervals (3rds, 5ths, etc.) • Describe the visual aspects of chords (notes stacked on top of each other, duration, syncopation, etc.) • Review chord structures (major, minor, augmented, diminished, etc.) • Discuss visual aspects of traditional (Roman numeral) notation system (big and little numbers, sub- and super-script notation, figured bass, etc.) 	<p>Week 2:</p> <ul style="list-style-type: none"> • Play major, minor, augmented, and diminished chords on the piano for students to hear and identify • Roman numeral analysis game (give the chord and students verbally label it in traditional Roman numeral notation) • HOMEWORK: Read Laitz – chapter 7 	<p>Week 2:</p> <ul style="list-style-type: none"> • In-class Praxis using the given chord progression of major, minor, augmented, and diminished chords
<p>2. Recognize Jazz and extended harmonies in various styles of music including Bach chorales and contemporary musical selections.</p>	<p>Week 3:</p> <ul style="list-style-type: none"> • Discuss the visual and musical aspects of traditional theory musical analysis • Review the Nashville Number System and chord function • Discuss salient harmonic features of Bach 	<p>Week 3:</p> <ul style="list-style-type: none"> • Nashville Number game (give students a chord sequence and have them give the Nashville Numbers for the chords) • Chorale activity: Paired with sighted partner, have students verbally analyze 8 measure of a Bach chorale (sighted students should play the selection on the piano and verbally spell 	<p>Week 3:</p> <ul style="list-style-type: none"> • Formative assessment: observations during Nashville Number game and Chorale activity

	<p>chorales (moving bass, etc.)</p> <p>Week 4:</p> <ul style="list-style-type: none"> Discuss constructs of jazz harmonies (7th, 9th, 11th, and 13th chords) Discuss labeling of jazz harmonies using Jazz notation <p>Week 5:</p> <ul style="list-style-type: none"> Recognize jazz harmonies in contemporary musical selections (listening examples) Analyze and label jazz harmonies in contemporary musical selections 	<p>each chord and identify any important musical aspects)</p> <ul style="list-style-type: none"> HOMEWORK: Read Laitz chapters 3-4 <p>Week 4:</p> <ul style="list-style-type: none"> Using the piano, spell jazz chords and discuss constructs of jazz chords Have students construct given jazz chords on the piano <p>Week 5:</p> <ul style="list-style-type: none"> Listen and identify jazz harmonies in Bradley Knight selection Using peer groups, work with a sighted partner and verbally indicate jazz harmonies (and correctly label each one) from given selections in the piece (sighted partner will verbally read and indicate the notes written on the page to visually impaired partner) 	<p>Week 4:</p> <ul style="list-style-type: none"> QUIZ: In a Word document, correctly label the given jazz chords that are spelled and played on the piano <p>Week 5:</p> <ul style="list-style-type: none"> Formative assessment: observation during the peer group assignment
3. Demonstrate musical analysis skills including identifying musical form.	<p>Week 6:</p> <ul style="list-style-type: none"> Review types of musical cadences and phrase types Recognize antecedent and 	<p>Week 6:</p> <ul style="list-style-type: none"> Musical Phrase Listening Game: Listen to selected musical examples and verbally identify each musical phrase 	<p>Week 6:</p> <ul style="list-style-type: none"> Summative assessment: listen to assigned song and write a

	consequent phrases, discuss irregular phrases	<ul style="list-style-type: none"> Praxis: compose an 8 measure piece using at least one antecedent and one consequent phrase HOMEWORK: Read Stein chapters 1-2 and Laitz chapter 9 	Reflection Paper about the musical phrases used in the piece
4. Create advanced and visually detailed lead charts for worship leading.	<p>Week 7:</p> <ul style="list-style-type: none"> Discuss important visual aspects of a lead and rhythm charts (key signature, title for chart, composer/arranger info, time and key signatures, copyright information, etc.) Discuss salient features of rhythm charts for worship <p>Week 8:</p> <ul style="list-style-type: none"> Explain Dancing Dots music notation software Default settings with Dancing Dots for Lead Chart Assignment Inputting notes and rhythms into Dancing Dots <p>Week 9:</p> <ul style="list-style-type: none"> Inputting lyrics into Dancing Dots 	<p>Week 7:</p> <ul style="list-style-type: none"> Set up the lead chart template in Dancing Dots Group Activity: discuss salient features of rhythm and lead charts and identify where important elements should be placed on the page <p>Week 8:</p> <ul style="list-style-type: none"> VIDEO about Dancing Dots software Begin crafting Lead Chart Assignment including inputting notes and rhythms correctly <p>Week 9:</p> <ul style="list-style-type: none"> Inputting activity: input the first 8 measures of chosen song for Lead 	<p>Week 7:</p> <ul style="list-style-type: none"> Summative Assessment: Submit a correctly formatted Lead Chart template using the Dancing Dots software <p>Week 8:</p> <ul style="list-style-type: none"> Formative assessment: informal quiz about inputting music into Dancing Dots software <p>Week 9:</p> <ul style="list-style-type: none"> Summative assessment: students submit first

	<ul style="list-style-type: none"> Discuss Playback in Dancing Dots <p>Week 10:</p> <ul style="list-style-type: none"> Finalizing Rhythm Chart Project 	<p>Chart Project into Dancing Dots software</p> <p>Week 10:</p> <ul style="list-style-type: none"> Playback activity: have student use the playback function in Dancing Dots to present what they have created on their Rhythm Chart Project so far, identifying elements that still need to be addressed Peer Activity: have a sighted peer review the Rhythm chart project and discuss elements that need to be addressed before submission 	<p>8 measures of song for Rhythm Chart Project</p> <p>Week 10:</p> <ul style="list-style-type: none"> Summative Assessment: Full Rhythm Chart submission DRAFT
5. Evaluate advanced harmonic progressions using traditional and non-traditional techniques.	<p>Week 11:</p> <ul style="list-style-type: none"> Chromaticisms in music Re-harmonizations in contemporary musical selections (embedded 2-5-1s, Tritone substitutions, etc.) <p>Week 12:</p> <ul style="list-style-type: none"> Re-harmonization in contemporary worship songs 	<p>Week 11:</p> <ul style="list-style-type: none"> Composition Game: Compose a 8-16 measure piece on the piano using chromaticisms Identify imbedded 2-5-1s in a contemporary worship song played on the piano HOMEWORK: Read Stein chapters 3-5 <p>Week 12:</p> <ul style="list-style-type: none"> Listen to re-harmonization examples Re-harmonize given worship song with 	<p>Week 11:</p> <ul style="list-style-type: none"> Formative assessment: observations during composition game <p>Week 12:</p> <ul style="list-style-type: none"> EXAM: submit re-harmonization project created

	<ul style="list-style-type: none"> • Musical examples of re-harmonization in classical and contemporary styles 	sighted partner; include 2-5-1s and tritone substitutions	during re-harmonization activity
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Learning Outcomes <i>(List them in the order you plan to address during the 12 weeks of curriculum.)</i>	Rational for Sequence <i>(Describe why you believe this sequence is the most effective.)</i>
1. Describe the visual aspects of a musical staff, note heads, note value, key signatures, and chord structures.	<p>Because visually impaired students often have no framework for what a musical staff or notation looks like, it is important to start with the basics. There needs to be a solid “picture” given to visually impaired students who are unable to “see” what other sighted students can easily see and recognize. This portion of the course builds the foundation for the musical concepts that will be discussed in the course.</p>
2. Recognize Jazz and extended harmonies in various styles of music including Bach chorales and contemporary musical selections.	<p>Graduate music students should already be somewhat familiar with musical analysis concepts. However, visually impaired students need to take a different approach with written music assignments such as these. While this may be a review for some, visually impaired music students need to have a strong understanding of how to approach musical analysis as a visually impaired student.</p>
3. Analyze music, including musical form.	<p>After discussing Jazz and extended harmonies, students need to then discuss the overall musical form of pieces, including antecedent and consequent phrases in music. Due to the complexity of musical understanding required for this task, this cannot be done until the previous stages have been completed.</p>
4. Create advanced and visually detailed lead charts for worship leading.	<p>It is important for visually impaired students to be able to function in a world of sighted musicians. In order for visually impaired students to easily communicate any original songs or musical ideas, they need to be able to notate these compositions in visual format through the use of Dancing Dots. Creating lead charts, and other such written music, opens the visually impaired music students to opportunities to more easily collaborate and create with sighted musicians. The lead chart is the major culminating project of the course.</p>
5. Evaluate advanced harmonic progressions using traditional and non-traditional techniques.	<p>This is an application of all information previously presented in the course. After studying harmonic progressions and other traditional and non-traditional techniques in the course, students need to be able to apply learned concepts to real-life examples they might encounter.</p>

CURRICULUM PROJECT – DEVELOPMENT CHART

Student: Moriah Wilson	Course for which you are creating curriculum: MUSC 500 Graduate Music Theory for the Visually Impaired Music Student - RESIDENTIAL
<p><i>Consider the 3 advance organizer methods below. You must create an advance organizer for each method below to use as a pre-instructional strategy (to prepare the student to link what they do know to what they do not know).</i></p>	
<p>Expository <i>(You are verbally describing the new content you are about to cover; enter below what you will say to the class as though it is in a script format)</i></p>	
<p>Good afternoon, class. How are you all doing today? As we continue in our discussion of graduate music theory, we are going to discuss the importance of creating rhythm charts that are visually detailed. While you may have had prior experience with creating rhythm or lead charts, we are going to discuss in-detail how to create a rhythm chart that is visually detailed for the sighted musician to be able to read. Up to this point in the class, we have reviewed and studied a lot of the visual aspects of music. As a graduate music student, it is imperative that you know the visual constructs of music. However, it is also important that you understand and be able to collaborate with sighted peers and other sighted musicians. Knowing how to create a rhythm chart with all of the visual aspects will allow you to be able to easily interact and collaborate with sighted musicians, and even create charts of your own original music to share with others. Today, we will discuss the important aspects of a rhythm chart and how to use the Dancing Dots software to create a rhythm chart. We will start by completing simple tasks in the Dancing Dots to become familiar with the software and begin working toward the Final Project.</p>	
<p>Narrative <i>(You are presenting the new information in a story format; enter below what you will do or say.)</i></p>	
<p>I will begin the class by playing an excerpt of Amazing Grace that has been input into the Dancing Dots software. From there, I will ask the class what they are hearing. I will ask, can you discern what the salient features are from the sound recording of the Dancing Dots file? I will also ask the class, what is the importance, as a visually impaired music student, of creating visually detailed rhythm charts? I will then lecture about the important visual aspects of a rhythm chart (key signature, instruments involved, syncopation, etc.). After the initial portion of the lecture, I will ask students to take out their personal laptop and pull up the Dancing Dots software. After completing simple tasks step-by-step in Dancing Dots (guided by me), students will break up into groups of two to begin working on the in-class assignment. Students will then begin inputting the first 8 measures of Amazing Grace. After inputting the first 8 measures of Amazing Grace, students will have a chance to reflect upon what they have learned in the beginning of this unit. For assessment, I will ask students to write a brief paragraph that discusses three things they learned during the class activity and use of the Dancing Dots software.</p>	
<p>Graphical Organizers <i>(You are presenting an original visual pictograph, chart, or concept pattern.) Describe the visual below and then copy and paste your original graphic.</i></p>	

The graph below explains the process of creating a rhythm chart. It is important for visually impaired students to know and understand fundamental and visual aspects of music before creating rhythm charts. Even though visually impaired students do not have much need for visually detailed rhythm charts, it is imperative that these students still be able to create rhythm charts in order to be able to more effectively and efficiently collaborate with sighted musicians. This process is laid out in the graphic below.

Copy and paste your original visual pictograph, chart, or concept pattern below:

Creating a Rhythm Chart



Gagne's Nine Events of Instruction

Instruction Event	Describe how each instructional event will be addressed in your instructional unit. Cite a reference from you text as to why this approach will be effective.
1. Gain attention	As students are walking in, I will play an excerpt from Amazing Grace that has been input into the Dancing Dots software. After gaining their attention, I will ask the class to describe what they are hearing to develop listening skills and cause them to begin thinking about the lecture topic. ⁷⁹
2. Inform learners of objectives	After gaining the attention of the class, I will explain to students the importance of knowing how to create rhythm charts that are visually detailed. I will explain why I have chosen the teaching methods that I have and the purpose of the in-class assignments and Final Project. ⁸⁰
3. Stimulate recall of prior learning	After discussing the learning objectives for the class period, I will ask students to call out important visual aspects of music and the musical staff discussed in previous class periods and ask them why these aspects are important. ⁸¹
4. Present the content	After reviewing previously learned information, I will introduce the Dancing Dots software. The lesson will use a mix of lecture and small group discussion and activity. I will explain some of the simple tasks that we will complete in the software program during the class period. ⁸²
5. Guide learning	I will ask students to open the Dancing Dots software on their computer and walk through various inputting tasks with me as I describe it to them. This will be an informal lecture as I help students navigate through the Dancing Dots software. I will provided a quick introduction to the software (students should already have some experience or familiarity with the software) and walk students through inputting notes, rests, and other important musical aspects into their Dancing Dots document. ⁸³

⁷⁹ Linda B. Nilson, *Teaching at Its Best: A Research-Based Resource for College Instructors*, (San Francisco: Jossey-Bass, 2016), 119.

⁸⁰ Ibid., 56.

⁸¹ Ibid., 115.

⁸² Ibid., 56.

⁸³ Ibid., 114.

6. Elicit performance (practice)	Students will be placed into small groups to being discussing and working on their Final Projects. The purpose of this group work is for students to build relationships and begin working together using the Dancing Dots software. ⁸⁴ The goal will be to have at least 4 measures of Amazing Grace inputted into Dancing Dots. ⁸⁵
7. Provide feedback	During the group activity, I will walk around the room to evaluate student performance and give students feedback on their assignment. ⁸⁶ After completing the group assignment, I will ask the students to reflect on any observations during the class period – especially any struggles or potential issues with the software.
8. Assess performance	Students will be assessed by their progress on the group assignment during the class time. Students will be asked to self-reflect and comment three things that they learned during the activity. ⁸⁷
9. Enhance retention and transfer	I will summarize the lesson. As a formative assessment, I will ask students to write a reflection paragraph based on the answers that they gave after the group assignment. ⁸⁸

⁸⁴ Nilson, *Teaching at Its Best*, 156.

⁸⁵ Ibid., 54.

⁸⁶ Ibid., 57.

⁸⁷ Ibid., 160.

⁸⁸ Ibid., 118.

CURRICULUM PROJECT – IMPLEMENTATION CHART

Part I: Evaluate and revise the analysis, design, and development charts and the learning objectives

For this assignment, identify all items and tasks that must be prepared before you begin teaching your instructional lesson

List at least 6 necessary, physical items and provide a rationale for its use (e.g., flashcards, PowerPoint presentations, handouts, activity sheets, flipcharts, etc.)

Student: Moriah Wilson	Course for which you are creating curriculum: MUSC 500 Graduate Music Theory for the Visually Impaired Music Student - RESIDENTIAL
Physical Item	Rationale for Use Cite a reference from your text for each item indicating its effectiveness
Computer with audio output	A computer with audio output is needed for the instructor to be able to play audio examples and use the Dancing Dots software while teaching. Using audio examples will allow visually impaired students to more deeply understand the topic being discussed as they connect hearing with learning and interact with the material. ⁸⁹
Keyboard/Headphones for each student	The class will take place in a music lab. Each student will have his/her own computer and keyboard with headphones in order to complete the in-class assignments and follow along with the instructor during the lecture. The computer will also be available for students to take notes electronically throughout the class period since they are unable to take effective notes by hand. ⁹⁰
Classroom set-up	Because the class involves visually impaired students, the classroom set-up is an important part of implementing the class. Students will be side-by-side in groups of 2-3 with each student at an individual work station with a computer and keyboard. This set-up will allow students to pair off with their classmates and discuss the lecture content at the given times during the lecture. ⁹¹
Dancing Dots electronic template “handout”	The electronic template file “handout” will assist students with completing the in-class peer group assignment. This template will provide the basic framework for completing the in-class Amazing Grace inputting assignment and will

⁸⁹ Nilson, *Teaching at Its Best*, 262.

⁹⁰ Ibid., 122.

⁹¹ Ibid., 118.

	serve as a problem-solving task for students to complete while working together in groups. ⁹²
Lecture Notes “Handout”	The instructor will provide an electronic copy (“handout”) of the lecture notes, in Word format, for students. By providing an electronic copy of the lecture notes, with instructions for the tasks completed in Dancing Dots during the lecture, students will have an electronic resource to refer to when completing assignments in Dancing Dots throughout the course. These notes will be easy to read and will include step-by-step instructions for inputting basic items into Dancing Dots. ⁹³
Sheet Music (Amazing Grace)	The sighted instructor will need a printed copy of Amazing Grace to be used at the classroom piano during the lecture. In order to make the lecture a learning experience and promote deeper-level student learning, the instructor will play Amazing Grace on the piano before the class discussion about inputting the piece into Dancing Dots. ⁹⁴

⁹² Nilson, *Teaching at Its Best*, 118.

⁹³ Ibid., 116.

⁹⁴ Ibid., 113.

Part II: List at least 6 necessary tasks and provide a rationale (e.g., jobs to be done in advance, such as arranging chairs in a specific formation, photocopying, etc.).

Task	Rationale for Task Cite a reference from your text for each task indicating its effectiveness
Arrange each student's desk in the classroom	Make sure each keyboard is ready for students and a set of headphones are available at each workstation in the classroom. By using their personal workstation, each student will have the ability to work alongside the instructor to complete simple tasks in Dancing Dots during the lectures. This classroom set-up will also allow students to discuss and interact with peers during group assignments. ⁹⁵
Prepare audio teaching examples	Input first 8 measures of Amazing Grace into Dancing Dots for playback during class. This template will provide them a framework to complete the in-class assignment. The purpose of the in-class assignment is to give students an opportunity to practice inputting notes/rhythms into Dancing Dots, which is one of the ways I plan to assess their learning at the end of the course. ⁹⁶
Send class email	Before the first day of class, the instructor will send an email to the class giving a broad overview of the structure of the class, setup of the classroom, class expectations, and any specific learning materials needed for the first day of class (recording device, laptop if desired, etc.). The instructor will also provide his/her contact information so that students can contact the instructor with any questions before the class begins. ⁹⁷
Create Dancing Dots template for the in-class peer group project	For the in-class assignment, I will prepare a template in Dancing Dots for students to complete the assignment. This allows for students to try out the discussed procedures in Dancing Dots and get quick feedback from me and their peer group members. ⁹⁸
Record lecture to be posted on Blackboard	Because visually impaired students are unable to take handwritten lecture notes, an audio recording of the lecture will be provided on Blackboard. This lecture is foundational to the student's understanding of the Dancing Dots software, so students need to be able to access these instructions at any point throughout the course. ⁹⁹

⁹⁵ Nilson, *Teaching at Its Best*, 231.

⁹⁶ Ibid., 108.

⁹⁷ Ibid., 259.

⁹⁸ Ibid., 264.

⁹⁹ Ibid., 257.

Type up Dancing Dots instructions	The instructor will provide an electronic copy of step-by-step instructions for completing basic tasks in the Dancing Dots software. Because lectures can be quickly forgotten, students will have an electronic resource to refer to when completing basic tasks in Dancing Dots throughout the course. ¹⁰⁰
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¹⁰⁰ Nilson, *Teaching at Its Best*, 113.

Part III: Describe in 4–6 sentences 1 type of Formative Assessment that you would choose to implement and detail its effectiveness for your course.

Formative Assessment Type	Assessment Details
Peer Groups and Dancing Dots in-class projects	All students will be expected to participate in Peer Group assignments that will take place at various points throughout the course. A lot of the Peer Group assignments will be focused on completing simple tasks in Dancing Dots with the purpose of incorporating peer discussion as students complete the assignments. Tasks such as note and rhythm input, lyrics, and articulations are important tasks for students to know how to complete. These assignments will allow students to learn how to complete the assignments while providing me, the instructor, an opportunity to assess student learning and answer any questions.

CURRICULUM PROJECT – EVALUATION CHART

Your Evaluation Plan

In the chart below, describe your plan for a formative assessment for each learning outcome in this unit

(This is something you would do before a summative assessment or exam to gauge the learner's grasp of the learning objective)

Student: Moriah Wilson	Course for which you are creating curriculum: MUSC 500 Graduate Music Theory for the Visually Impaired Music Student - RESIDENTIAL	
Learning Outcomes	Your Formative Assessment Plan	Rationale for Formative Assessment Type <i>(Describe why you believe this assessment is the most effective and cite a reference from your text for support)</i>
1. Describe the visual aspects of a musical staff, note heads, note value, key signatures, and chord structures.	Following the first couple of lectures regarding the visual aspects of music, students will be asked to identify and record their muddiest point from the material covered in the course so far.	The primary purpose of this assignment is to gauge whether or not students are understanding the material. By identifying each student's muddiest point, the instructor will be able to clarify the muddiest points for the entire class while re-framing the class material for deeper understanding and retention. ¹⁰¹
2. Recognize Jazz and extended harmonies in various styles of music including Bach chorales and contemporary musical selections.	Students will be given 4-measures of a Bach chorale to analyze. As the instructor plays the piece on the piano and spells the notes used in the chord, each student will be called up to verbally label and correctly identify each chord and its inversion.	This assessment will serve as a mock test for students to review and really think about the material learned in the course thus far. ¹⁰² It will also provide the instructor with the opportunity to provide feedback and recommendations to students to improve their understanding of the material. ¹⁰³

¹⁰¹ Nilson, *Teaching at Its Best*, 275-276.

¹⁰² Ibid., 171.

¹⁰³ Ibid., 277.

3. Analyze music, including musical form.	Students will work in peer groups with their sighted partners to complete a homework assignment identifying musical form. Students will also need to discuss phrase lengths and irregular phrases as a part of this group discussion.	This assessment will allow students to be held responsible for their own learning as well as contributing to the learning of others. ¹⁰⁴ The primary purpose of this assignment is for students to be able to evaluate their understanding of the material while providing opportunities for students to discuss salient features of musical form with their peers.
4. Create advanced and visually detailed lead charts for worship leading.	Students will submit an 8 measure assignment of Amazing Grace that has been electronically inputted into the Dancing Dots software.	This assessment will provide the instructor with indicators of what additional information may need to be covered. It will also provide the instructor an effective way to provide feedback for students and evaluate whether or not students are grasping the skills needed for the Final Project. ¹⁰⁵
5. Evaluate advanced harmonic progressions using traditional and non-traditional techniques.	Students will be asked to create and play a provided advanced harmonic progression on the piano in front of the class.	This formative assessment is an informal opportunity for students to demonstrate knowledge discussed in this unit of the course. ¹⁰⁶ Because this assignment is learner-centered and praxial in nature, students will be able to receive feedback from the instructor during this ungraded activity.

¹⁰⁴ Nilson, *Teaching at Its Best*, 158-159.

¹⁰⁵ Ibid., 273.

¹⁰⁶ Ibid., 274.

Evaluation and Reflection

Consider all of the charts and stages of development in order to create your syllabus. List 10 issues or strategies that must be addressed to make your unit stronger and more concise. Provide a rationale for your choice.

Issue/Strategy	Rationale for Changing
1. Students not understanding that this course will pair them with sighted partners from the concurrent Graduate Music Theory class	I realized that I need to be clearer in my presentation of the course and course description. This is vital for my syllabus and to provide students with accurate and detailed information about the course scope and sequence. ¹⁰⁷
2. Not enough time to cover all material needed for the course	I will be changing my teaching schedule a bit to accommodate more time for students to connect learned information with new information. I am planning to revise my teaching content so that I am not teaching too much content and covering the chosen content thoroughly. ¹⁰⁸
3. Lack of student engagement	Because this course is praxial and student involvement is imperative, I have shifted some of my formative assessments. I plan to include additional in-class performance opportunities as well as more peer discussion/interaction to help encourage student engagement. ¹⁰⁹
4. Lack of resources (time, etc.) available by the instructor to commit to assisting each student	Because students with disabilities often need extra, or detailed, attention, it is difficult for an instructor to teach a course with multiple students with disabilities. I believe that the addition of more formative assessments will allow the instructor to provide students with more feedback and recommendations at earlier stages in the course. ¹¹⁰
5. Students approaching the subject matter from different backgrounds (prior knowledge is at different levels)	Because curriculum is in a perpetual state of reform, and students will be coming from different backgrounds and understandings of music, I have decided to implement a pre-test to be taken on the first day of class. ¹¹¹ The pre-test will provide information on students' prior knowledge nad

¹⁰⁷ Nilson, *Teaching at Its Best*, 33-34.

¹⁰⁸ Ibid., 29.

¹⁰⁹ Ibid., 133-134.

¹¹⁰ Ibid., 277.

¹¹¹ Thomas W. Hewitt, "Introduction," in *Understanding and Shaping Curriculum: What We Teach and Why*, (Thousand Oaks, CA: SAGE Publications, Inc., 2012), 15.

	misconceptions about the subject matter while providing the instructor with a good understanding of the student demographic before the course is in full swing. ¹¹²
6. Greater personal interaction with students through consistent formative assessments	I have added additional formative assessment to my course in order to provide greater interaction with students. These informal interactions will allow me to understand each student's learning pace while offering helpful feedback consistently throughout the course. ¹¹³

7. Lack of ability to portray or demonstrate concepts visually	Because visual learning is essentially eliminated for visually impaired students, I am planning to adjust the course to include more use of audio examples. By using technology to integrate audio examples into the course lectures, visually impaired students will have different avenues to learn the course content. ¹¹⁴
8. Lack of non-verbal communication (motions, visual examples, etc.).	Teaching the visually impaired requires unique accommodations for the instructor as the non-verbal aspect of communication is non-existent. The instructor will need to be extra detailed in teaching content while describing to students what he/she is physically doing. Even though students are unable to visually see what is happening, the instructor will need to be extra conscious of describing visual aspects of content to students whose learning styles are different than the typical student demographic. ¹¹⁵
9. Preparing students thoroughly ahead of time for the scope, sequence, and methodology of the course	Because this course is rigorous, I need to prepare students ahead of time for the assignments and expectations of the course. For the first class period, "syllabus day," I will give students a thorough overview of the course expectations and assignments. Because this is a unique course with a unique audience, I also plan to discuss some of my teaching methods, as well as in-class activities and assessment strategies I will employ throughout the course. ¹¹⁶
10. Not enough variety in summative assessments	To provide more variety to the course summative assessments, I have decided to have students turn in a 2-3 page Reflection Paper that contains their reflections on the process of creating and constructing the Rhythm Chart.

¹¹² Nilson, *Teaching at Its Best*, 275.

¹¹³ Ibid., 273.

¹¹⁴ Ibid., 263.

¹¹⁵ Ibid., 229.

¹¹⁶ Ibid., 56.

	This will enable the instructor to assess and evaluate higher-order thinking and provide some variety to the course's summative assessments. ¹¹⁷
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¹¹⁷ Nilson, *Teaching at Its Best*, 291.

CURRICULUM PROJÉT BIBLIOGRAPHY

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IRB Waiver

LIBERTY UNIVERSITY

INSTITUTIONAL REVIEW BOARD

June 26, 2019

Moriah Wilson

IRB Application 3874: Graduate Music Theory for the Visually Impaired Music Student

Dear Moriah Wilson,

The Liberty University Institutional Review Board has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study does not classify as human subjects research. This means you may begin your research with the data safeguarding methods mentioned in your IRB application.

Your study does not classify as human subjects research because it will not involve the collection of identifiable, private information.

Please note that this decision only applies to your current research application, and any changes to your protocol must be reported to the Liberty IRB for verification of continued non-human subjects research status. You may report these changes by submitting a new application to the IRB and referencing the above IRB Application number.

If you have any questions about this determination or need assistance in identifying whether possible changes to your protocol would change your application's status, please email us at irb@liberty.edu.

Sincerely,

G. Michele Baker, MA, CIP
Administrative Chair of Institutional Research
Research Ethics Office

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