

Liberty University

School of Music

**Teaching Instruments to Deaf and Hard of Hearing Students**

A Thesis Submitted to  
the Faculty of the School of Music  
in Candidacy for the Degree of  
Master of Music Education

by

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## **ABSTRACT**

This curriculum project provides information regarding teaching musical instruments to Deaf and Hard of Hearing (DHH) students in elementary school settings. Previous studies have addressed teaching DHH students reading, writing, and general music, but not much on implementing musical instruments for DHH students. In this study, the researcher will have extensive document reviews on the importance of music education for DHH students and identify the ways to teach DHH students about instrument playing. Furthermore, the researcher will prepare lesson plans teaching musical instruments for DHH students in elementary music classrooms and add more data for analysis. The results of this study will benefit both music educators and DHH students in teaching and learning musical instruments.

*Keywords: music education, Deaf and Hard of Hearing (DHH) students, music instruments, music programs for DHH students, K-6 music program*

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## **ABBREVIATIONS**

Auslan: Australian Sign Language

CIs: Cochlear implants

DAD: Deafness and Diversity

DHH: Deaf and Hard of Hearing

DML: DHH children who come from parents or caretakers use a language other than English

DWD: Deaf with a disability or disabilities

IEP: Individualized education program

LSL: Listening and Spoken Language

LRE: Least restrictive environment

SDH: Subtitles for the Deaf and Hard of Hearing

UDL: Universal Design for Learning

VAPA: Visual and Performing Arts

## CHAPTER ONE: INTRODUCTION

### Background

Music education greatly impacts every student every day. Music fosters academic and emotional development, and the music classroom environment transforms so much.<sup>1</sup> So, music educators should be ready to teach in ever-changing, diverse classroom settings, including students with disabilities. Music classes provide academic and emotional support to students with disabilities, just as to hearing students.<sup>2</sup> Just because DHH students are not able to hear well, they should not be excluded from music education. Music education should be offered equally to DHH students so they can also develop lifelong learning of music-making.

This research will focus on Deaf and Hard of Hearing (DHH) students and how to teach musical instruments in a general music classroom. It involves utilizing modified lesson plans, incorporating visual aids, and using assistive technologies. Above all, music education can be a powerful tool that can open the door for social, emotional, and cognitive benefits for DHH students.<sup>3</sup> By creating accessible and engaging music programs, everyone, regardless of any disabilities, will have the opportunity to experience the joy of music. As Plato states in *The Republic*, “Music is a more potent instrument than any other for education because rhythm and harmony find their way into the inward places of the soul.” This paper will guide readers through

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<sup>1</sup> Phillip M. Hash, “Teaching Instrumental Music to Deaf and Hard of Hearing Students,” *Research & Issues in Music Education* 1, no. 1 (September 2003), <https://commons.lib.jmu.edu/rime/vol1/iss1/5/>.

<sup>2</sup> Elaine Kirk Thagard, Amanda Strong Hilsmier, and Susan R. Easterbrooks, “Pragmatic Language in Deaf and Hard of Hearing Students: Correlation with Success in General Education,” *American Annals of the Deaf* 155, no. 5 (2011): 526-534, <https://www.jstor.org/stable/10.2307/26235109>.

<sup>3</sup> Feng Wang, Xiaoning Huang, Sadaf Zeb, Dan Liu, and Yue Wang. “Impact of Music Education on Mental Health of Higher Education Students: Moderating Role of Emotional Intelligence,” *Frontiers in Psychology*, June 14, 2022, [10.3389/fpsyg.2022.938090](https://doi.org/10.3389/fpsyg.2022.938090).

making a safe and accessible classroom for DHH students, which will help them build a lifelong habit of music-making.

### **Statement of the Problem**

There are many past studies and ongoing research about DHH students and their reading, comprehension abilities, and math skills. However, there is not much research regarding music education for DHH students, especially in relation to musical instruments. In this paper, the author will study the characteristics of DHH students and their communities, optimal instrument choices, and lesson plans to educate teachers to teach DHH students.

### **Statement of the Purpose**

Teaching DHH students is known to be one of the most challenging and diverse fields in education.<sup>4</sup> There are many elements to consider in making the music classroom inclusive and accessible. First, teachers need to understand DHH students and their community, what students are capable of, and how to accommodate each student. Besides teaching lessons, well-developed assessments are necessary to see how students perceive and understand the lesson. Furthermore, students can use self and peer assessment to see how their learning process is going.<sup>5</sup> This research will provide extensive literature reviews and suggestions on how to draw lesson plans that will benefit DHH students and educators for analysis.

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<sup>4</sup> Raschelle Neild, and Michael Fitzpatrick, "Overview of Assessment for Deaf and Hard of Hearing Students," *Psychology in the Schools* 57, no. 3 (November 2019): 331-343, <https://doi.org/10.1002/pits.22317>.

<sup>5</sup> Irene De Higes Andino, and Beatriz Cerezo Merchan, "Using Evaluation Criteria and Rubrics as Learning Tools in Subtitling for the D/deaf and the Hard of Hearing," *The Interpreter and Translator Trainer* 12, no. 1 (January 2018): 68-88, <https://doi.org/10.1080/1750399X.2017.1418809>.



### **Significance of the Study**

There is a significant amount of research regarding DHH student's learning and reading abilities, but there is not much study about DHH students learning musical instruments. Often, music education is neglected for DHH students due to their physical condition.<sup>6</sup> This study investigates how instrumental music instruction can be constructed for DHH students, which can foster their musical needs. The findings of this paper will provide ways to implement musical instruments for elementary DHH students and help other music teachers start the curriculum or enhance already implemented lesson lessons to improve the methods. Teachers will learn to start inclusive practices by creating accessible classroom environments with proper assistive technologies and inclusive teaching methods. This study will also explore different methods to assess DHH students using a variety of formal and informal methods, which will help teachers gauge student progress and tailor instruction accordingly. Furthermore, teachers will collaborate with other educators, helpers, and family members to create effective music education programs for DHH students.

### **Research Questions**

What are the challenges for Deaf and Hard of Hearing students to learn how to play musical instruments?

How can music educators make music programs more inclusive and accessible for Deaf and Hard of Hearing students?

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<sup>6</sup> Rebecca L. W. Jackson, Sarah B. Ammerman, and Blane A. Trautwein, "Deafness and Diversity: Early Intervention," *Gallaudet University Press* 160, no. 4 (Fall 2015): 356-367, <https://www.jstor.org/stable/26235227>.

### **Hypothesis**

The best way to start instrumental playing for Deaf and Hard of Hearing students will be to begin with body percussion and movements that will help to build their motor skills.

By incorporating visual cues and modifying teaching methods, music educators will be able to find ways to teach Deaf and hard-of-hearing students musical instruments.

## CHAPTER TWO: LITERATURE REVIEW

### Introduction

Since Lowell Mason introduced music education in public schools, there have been many innovative methods and efforts coming up with better teaching methods for students. This process is ongoing as many educators try to improve the best options for our students. Music education integrates arts, communication, and recreation with enjoyment and entertainment, which promotes creativity, academic ability, and a learning environment.<sup>1</sup> However, there are not many curriculum plans laid out for students with disabilities, especially for Deaf and Hard of Hearing (DHH) students.

### Studies in Deaf and Hard of Students

According to Montiegel, there were about 70 million Deaf people in the United States in 2015, and 32 million were children.<sup>2</sup> There are some aspects related to brain functions that obstruct DHH children's daily lives due to their inability to hear. Potmesilova suggests that intellect and creativity are closely related according to Guilford's theory, and they are cognition, memory, convergent thinking, divergent thinking, and evaluation.<sup>3</sup> With these five elements, creativity can generate new ideas to face problems and grow communication, which leads to a better personal life.

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<sup>1</sup> Lauri H. Nelson, Whitney Wright, and Elizabeth W. Parker. "Embedding Music into Language and Literacy Instruction for Young Children Who Are Deaf or Hard of Hearing," *Young Exceptional Children* 19, no. 1 (March 2016): 27-38, <https://doi.org/10.1177/1096250614566539>.

<sup>2</sup> Kristella Montiegel, "'Use Your Words': Vocalization and Moral Order in an Oral Preschool Classroom for Deaf or Hard-of-Hearing Children," *Language in Society* 52, no. 1 (February 2023): 107-127, <https://doi.org/10.1017/S0047404521000786>.

<sup>3</sup> Petra Potmesilova, Milon Potmesil, and Miloslav Klugar. "The Difference in the Creativity of People Who Are Deaf or Hard of Hearing and Those with Typical Hearing: A Scoping Review," *Children* 10, no. 8 (August 2023), <https://doi.org/10.3390/children10081383>.

Another article that relates hearing problems to different brain functions is called Sensorimotor skills. According to the article by Guan and Smolen, sensorimotor skill is how naturally the brain incorporates multiple senses and movements. Guan and Smolen explain that sensorimotor incorporation is to “integrate multiple information sources,” which will eventually construct physical reactions, emotions, and thoughts. In other words, sensorimotor integration is the information to oneself from movement and the senses.<sup>4</sup>

According to the study, children need to see, feel, and hear to develop sensorimotor skills that are vital at an early age. Children start building skills to learn language, motor skills, and knowledge, but babies born with hearing problems miss auditory aspects of sensorimotor skills. One of the important skills that sensorimotor skills help to develop is language acquisition. Since DHH children lack hearing aspect at a young age, most DHH children struggle with language deprivation because of not hearing any spoken language or sign language.<sup>5</sup> Even with help with hearing aids and cochlear implants (CIs), there are still complications that obstruct DHH children in language acquisition. Due to language deprivation, many DHH students struggle with math and other subjects, too. According to Techaraungrong, DHH students’ mathematical performance is usually lower than hearing students at school.<sup>6</sup> Also, due to other conditions DHH students have, it affects their long-term memory, too, which adds one more layer to the challenges students face.

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<sup>4</sup> Connie Qun Guan, and Elaine R Smolen, “Visual-Motor Integration in Language Learning Among Deaf and Hard of Hearing Children,” *American Annals of the Deaf* 167, no. 3 (January 2022): 355-371, <https://doi.org/10.1353/aad.2022.0032>.

<sup>5</sup> Guan, and Smolen, “Visual-Motor Integration in Language Learning Among Deaf and Hard of Hearing Children.”

<sup>6</sup> Piyaporn Techaraungrong, Surachai Suksakulchai, Wacheerapan Kaewprapan, and Elizabeth Murphy, “The Design and Testing of Multimedia for Teaching Arithmetic to Deaf Learners,” *Education and Information Technologies* 22, no. 1 (January 2017): 215-237, <https://doi.org/10.1007/s10639-015-9441-1>.

### **Previous Cases of Music Education for DHH Students**

Almost two hundred years ago, there were reports about music being used as supplementary material to speech remediation.<sup>7</sup> From 1995 book by Darrow and Heller records of advocacy of music for the “hearing-impaired” that taught a deaf woman to play piano.<sup>8</sup> In Churchill’s article, educators were teaching music to DHH students by musicking. Musicking is taking any part in performing, listening, rehearsing, practicing, or dancing.<sup>9</sup> So basically, any form of music-making is called musicking. In the early 1900s, there were even military bands to train deaf musicians like Fred Fancher, who was a deaf bandmaster from Tennessee, and he led a musical band at the Illinois School of the Deaf in the 1900’s.<sup>10</sup> So, a great number of DHH students have joined instrumental music programs and were successful.<sup>11</sup> Nevertheless, many music directors are hesitant to include DHH students in school programs due to the uncertainty as to how to guide them. This research paper will explore the options for DHH students, so they can join music classes for learning musical instruments.

### **Understanding DHH Students and Their Community**

Ham et al. categorize Deaf people by levels of their hearing ability. Being deaf with a lowercase “d” means people with severe or profound hearing loss. The term “deaf” is used in medical terminology. Another form of medical terminology is hearing impaired. Hearing impairment is mostly used by health care professionals but is not preferred by people with

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<sup>7</sup> Warren N. Churchill, “Deaf and Hard-of-Hearing Musicians: Crafting a Narrative Strategy.” *Sempre* 37, no. 1 (June 2015): 21-36. <https://journals.sagepub.com/doi/10.1177/1321103X15589777>.

<sup>8</sup> Ibid.

<sup>9</sup> Ibid.

<sup>10</sup> Churchill, “Deaf and Hard-of-Hearing Musicians: Crafting a Narrative Strategy.”

<sup>11</sup> Hash, “Teaching Instrumental Music to Deaf and Hard of Hearing Students”

hearing loss and deafness. Oral deaf means to communicate in aural and oral forms. Oral deaf people refer to those who use hearing assistance devices like hearing aids, cochlear implants (CIs), and assistive listening devices. Deaf with uppercase D is the one used by deaf people, and their primary and inclined way of communication is using sign language. The term for people born with normal or mild to moderate hearing loss in most of their lives and then having severe to profound hearing loss in their later years is called late deafened. Since late deaf people were exposed to hearing and speaking in earlier lives, their main way to communicate was through aural and oral communication. Some oral deaf or late deafened people like to be recognized as hard-of-hearing people.<sup>12</sup>

In the DHH community, deafness is not considered a disability, but more like one of a diversity group of linguistic cultures. This is why they like to be considered Deaf or a person with deafness rather than deaf with a lowercase “d”. Since the hearing impaired term is centered on the disability, this terminology is not favored by the Deaf community or supporting networks.<sup>13</sup> DHH community is not just for people with hearing problems but also includes families, caregivers, and interpreters who work for the Deaf community. DHH students’ families struggle a lot due to logistical and emotional issues when they first find out their infants have hearing issues. Families need to design healthy learning environments for DHH students. Moreover, families need to be recognized and strengthened for their skills and support for their well-being and engagement.<sup>14</sup>

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<sup>12</sup> Jennifer Ham, Angela Towle, and Grace Shyng, “Deaf and Hard of Hearing Awareness Training: A Mentor-Led Workshop,” *The Clinical Teacher* 18, no. 2 (November 2020): 180-185, <https://asmepublications.onlinelibrary.wiley.com/doi/10.1111/tct.13304>.

<sup>13</sup> Ham et al., “Deaf and Hard of Hearing Awareness Training: A Mentor-Led Workshop.”

<sup>14</sup> Jackson et al., “Deafness and Diversity: Early Intervention.”

## Challenges

In the current society, using oral communication is considered a social norm and moral way to understand each other, and that includes school classrooms, too. Students are expected to use their words to carry out social actions and to keep interactions.<sup>15</sup> People who do not have the same condition as other people are labeled "disabled." Children with disabilities and impairments often perceive negative thinking on the word disability.<sup>16</sup> Many times, Deaf people feel rejection and exclusion, which eventually leads to a higher rate of being bullied by others. Cagulada reports that Deaf children have a hard time building self-confidence and finding their own identities due to isolation and depression.<sup>17</sup>

Many numbers of Deaf babies are born from hearing parents who have not acquired the ability to communicate with their child yet.<sup>18</sup> Because of a lack of common exposure to daily activities, DHH children show difficulties in practical behaviors, too. Most likely, infants with hearing problems would not be able to accumulate activity skills related to speech with their parents. The absence of hearing impacts children's ability to collect vocabulary, grammar, reading, and speech skills.<sup>19</sup> This absence creates a great gap in academic achievements between DHH children and hearing children that would not get closed in time or by education. People

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<sup>15</sup> Montiegel, "Use Your Words": Vocalization and Moral Order in an Oral Preschool Classroom for Deaf or Hard-of-Hearing Children."

<sup>16</sup> Elaine Cagulada, and Donna Koller, "'It's a Hearing World': Parents' Perspectives of the Well-Being of Children Who are Deaf and Hard of Hearing," *Deafness & Education International* 22 no. 2 (June 2019): 139-155, <https://doi.org/10.1080/14643154.2019.1635297>.

<sup>17</sup> Cagulada, and Koller, "'It's a Hearing World': Parents' Perspectives of the Well-Being of Children Who are Deaf and Hard of Hearing,"

<sup>18</sup> Martina Curtin, Madeline Cruice, Gary Morgan, and Rosalind Herman, "Assessing Parent-Child Interaction with Deaf and Hard of Hearing Infants aged 0-3 years: An International Multi-Professional e-Delphi," *Plos One*, April 29, 2024, <https://oec.ovid.com/article/00020840-202106000-00005/HTML>.

<sup>19</sup> Thagard et al., "Pragmatic Language in Deaf and Hard of Hearing Students: Correlation with Success in General Education."

acquire pragmatic language skills by listening to other people using the language of the social culture, which is impossible for DHH children.<sup>20</sup>

Another challenge DHH students had to face was the lack of support they had throughout COVID-19. During the pandemic outbreak, educational systems around the world were impacted gravely, which caused everyone to adjust and suffer as all the institutions had to stop any face-to-face contact and activities across schools, colleges, and universities.<sup>21</sup> Among many problems in educational systems, DHH students were affected greatly by COVID-19. Since all the instructional methods converted to online content, DHH students were not getting enough access to sign interpreters. Many learning materials for DHH students could not accompany transcripts and captions at that time. Even after the school started in-person, DHH students still struggled to get visual signs and auditory signals from the instructors because of the use of face masks.<sup>22</sup>

### **Early Detections**

According to the Centers for Disease Control and Prevention, ninety-seven percent of newborn babies get tested for hearing loss in the United States nowadays.<sup>23</sup> Almost two decades ago, only 3% of infants had been tested for hearing loss.<sup>24</sup> Since more newborn babies get tested for hearing ability these days, the number of hearing loss in babies has increased. Furthermore, more premature infants have higher survival rates due to the advances in the medical field, so

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<sup>20</sup> Thagard et al., “Pragmatic Language in Deaf and Hard of Hearing Students: Correlation with Success in General Education.”

<sup>21</sup> Wajdi Aljedaani, Rrezaprrta Krasniqi, Sanaa Aljedaani, Mohamed Wiem Mkaouer, Stephanie Ludi, and Khaled Al-Raddah, “If Online Learning Works for You, What About Deaf Students? Emerging Challenges of Online Learning for Deaf and Hearing-Impaired Students During COVID-19: a Literature Review,” *Universal Access in the Information Society* 22 (July 2022): 1027-1046, <https://doi.org/10.1007/s10209-022-00897-5>.

<sup>22</sup> Ibid.

<sup>23</sup> Jackson et al., “Deafness and Diversity: Early Intervention.”

<sup>24</sup> Ibid.



there is an increase in the premature babies who are born with medical complications, such as Down syndrome, usher syndrome, and infections like meningitis and cytomegalovirus which make DHH babies' condition more trickier than it is.<sup>25</sup>

### **Technological Help for DHH Students**

There are medical technologies that can help DHH students integrate into building social culture with other hearing people. The most popular technological help are hearing aids, cochlear implants, wireless microphones, and the system that converts sign language to text or vice versa. The use of CIs is increasing as it gives more chances for DHH people to be included in the social, academic, and workplace.<sup>26</sup> However, the cochlear implant is not sufficient to help DHH people to hear clearly; hearing and language rehabilitation are also needed to utilize the device in the best possible way.<sup>27</sup> For young Deaf children, there is a remarkable advancement in auditory repertoire after a year of using cochlear implants; nonetheless, Deaf children's speaking skills are not up to the same level as their hearing children.<sup>28</sup>

One of the new emerging technologies for DHH students is Wireless Remote Microphones (WRM). It is used as a supplementary listening device for DHH students who already have hearing aids or CIs. The device helps to control the downside effects of noise and distance to understand another person's speaking.<sup>29</sup> Teachers have also recognized improved

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<sup>25</sup> Ibid.

<sup>26</sup> Fernando Del Mando Lucchesi, and Ana Claudia Moreira Almeida-Verdu, "Teaching Language Components to Deaf/Hard-of-Hearing and Cochlear Implant Users: a Literature Review," *REVISTA CEFAC* 19, no. 6 (April 2017): 855-867, <https://doi.org/10.1590/1982-021620171965717>.

<sup>27</sup> Ibid.

<sup>28</sup> Ibid.

<sup>29</sup> Kristyna Gabova, Jana Furstova, and Peter Tavel, "Wireless Microphones for Students Who Are Deaf and Hard of Hearing: Czech Teachers' Perspective," *Journal of Research In Special Educational Needs* 24, no. 1 (January 2024): 68-79, <https://doi.org/10.1111/1471-3802.12614>.

responses from students, which has led to better engagement in the classroom and optimal management of multiple instructions, so students would not ask to repeat the same material again due to not being able to understand and confusion from similar sounding words.<sup>30</sup>

The latest technological advancement, for example, the Wireless Remote Microphones (WRM) listed above, is a real-time sign language-to-speech conversion system. Most hearing people do not know how to sign, which can lead to a significant communication gap between the DHH community and the hearing community. The WRM device uses a camera to detect an individual's sign language and then translate the motion to the speech part.<sup>31</sup> There is also a way to transcribe verbal speech and acoustical information like sound effects, speaker identification, and music tagging into text.<sup>32</sup> Still, a limit on the acoustic information in the soundtrack, television, movies, Internet, and other ways for collecting information leads the way to the loss of a lot of emotional content for DHH people.<sup>33</sup>

Despite the improvement of hearing aids, CIs, and wireless remote microphones that help DHH children to hear better and help to speak, DHH children would still experience difficulties in language acquisition outcomes.<sup>34</sup> Without proper hearing ability, DHH children lack a lot of information and knowledge in acquiring language skills. There are some special education

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<sup>30</sup> Ibid.

<sup>31</sup> Binwant Kaur, Aastha Chaudhary, Shahina Bano, Yashmita, S.R.N. Reddy, and Rishika Anand, "Fostering Inclusivity through Effective Communication: Real-Time Sign Language to Speech Conversation System for the Deaf and Hard-of-Hearing Community," *Multimedia Tools and Applications* 83 (October 2023): 45859-45880, <https://doi.org/10.1007/s11042-023-17372-9>.

<sup>32</sup> Pablo Revuelta, Toas Ortiz, Maria J. Lucia, Belen Ruiz, and Jose Manuel Sanchez-Pena, "Limitations of Standard Accessible Captioning of Sounds and Music for Deaf and Hard of Hearing People: An EEG Study," *Frontiers in Integrative Neuroscience* 14, no. 1 (February 2020): 1-9, <https://doi.org/10.3389/fnint.2020.00001>.

<sup>33</sup> Ibid.

<sup>34</sup> Guan, and Smolen, "Visual-Motor Integration in Language Learning Among Deaf and Hard of Hearing Children."

teachers who likes to implement an educational program where DHH students can learn how to put captions as a learning tool to bridge this gap. Overall, subtitles for the deaf and hard of hearing (SDH) are used to provide information on audiovisual information, and students working on subtitling with the help of specific software to insert the subtitles on the video can learn by processing the work.<sup>35</sup> This learning action aids in increasing the writing and listening skills of DHH students.

### **DHH Students in General Education Classes**

DHH students in mainstream classrooms often have difficulties in social participation, communication, and effective interaction with hearing students in the classroom.<sup>36</sup> Despite its challenge, there is a study on DHH students who spend more time in mainstreamed settings in high school and participate well, tend to have a more solid goal of going after college preparatory courses and have higher academic outcomes than those who were less involved in mainstreamed general education classes.<sup>37</sup> So, it is vital to lead DHH students in special classes and include them in general education classes because it is important for DHH students as it exposes them to social interactions. Nevertheless, it is still challenging to educate DHH students in general education classes because there are not many educators who qualify to teach DHH students to accommodate their needs.

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<sup>35</sup> Noa Talavan, "Using Subtitles for the Deaf and Hard of Hearings an Innovative Pedagogical Tool in the Language Class," *International Journal of English Studies* 19, no. 1 (January 2019): 21-40, <http://dx.doi.org/10.6018/ijes.338671>.

<sup>36</sup> Thagard et al, "Pragmatic Language in Deaf and Hard of Hearing Students: Correlation with Success in General Education."

<sup>37</sup> Ibid

### Music Education for DHH Students

According to Kyriakou, music was perceived as hearing people's activity. Therefore, it was barely used for educational purposes, but sometimes, it was used as a tool in speech therapy and language acquisition.<sup>38</sup> Kyriakou thinks music programs for DHH students were not successful because many schools lacked appropriate accommodations for students. There are several schools for deaf students across the United States and two in the state of California. These schools for the Deaf cater elementary to high school programs for DHH students. Schools follow state guidelines and requirements to educate DHH students to be successful once they graduate from high school and move up to college education. Schools support students with many athletic activities and classes to fulfill Visual and Performing Art (VAPA) categories. Under VAPA requirements, one school in Southern California has Digital Imaging, Graphic Design, Broadcast and Video Production, and Film Making classes; however, no music classes are included. Given the fact that there are practically no sound but only sign language presentations on the school website, the school does not offer any form of music classes to students. This is probably true for other schools for DHH students, as there are not many deaf schools offering music programs to students. There must be numerous reasons behind this issue, and part of it is due to not having enough educators with proper training, not recognizing the capabilities of DHH students, and negative effects on the performance condition of the ensemble. Teaching DHH students with musical instruments is feasible, just like hearing students, but with considerable modification, accommodation, and commitment from the teacher. Thus, this paper will investigate methods to train DHH students in musical instrument performances, so music teachers can reference it for their own classrooms.

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<sup>38</sup> Karen Kyriakou, "Teaching Music to Deaf Students: A Personal Reflection," *Australian Journal of Music Education* 54, no. 2 (2022): 52-59, <https://search.informit.org/doi/abs/10.3316/informit.839745080635214> .

## The Theoretical Framework

Music making, also known as musicking, takes part in a musical performance by performing, listening, rehearsing, practicing, composing, or dancing.<sup>39</sup> Musicking requires many physical functions that are necessary to join music making. Psychologists and developmental biologists Jean Piaget came up with four stages of intellectual development for children and teens.<sup>40</sup> According to Piaget's theory, babies from birth through 2 years old develop sensorimotor skills so that infants get alert of things that are in front of them. Babies learn to use their senses and motor skills by watching and listening to adults' physical interactions. At the end of the sensorimotor stage, which is between 18 to 24 months, they start showing signs of early language development.<sup>41</sup>

The principles of sociocultural theory can be also used in music performance for DHH students. Sociocultural theory regards the contributions of society to individual development.<sup>42</sup> Psychologist Lev Vygotsky believed that cognitive development is heavily impacted by their surrounding people, who are parents, caregivers, peers, and culture for intelligence.<sup>43</sup> Humans' cognitive functions can be matured by interaction with others who are more advanced than individuals. This can be done by watching, touching, and listening. Since DHH children lack the ability to listen well, it might affect their cognitive functions which are vital in musical performance.

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<sup>39</sup> Churchill, "Deaf and Hard-of-Hearing Musicians: Crafting a Narrative Strategy."

<sup>40</sup> David Henry Feldman, "Piaget's Stages: The Unfinished Symphony of Cognitive Development," *New Ideas in Psychology* 22, no. 3 (December 2004): 175-231, <https://doi.org/10.1016/j.newideapsych.2004.11.005>.

<sup>41</sup> Ibid.

<sup>42</sup> Kendra Cherry. "What is Sociocultural Theory?" *Very Well Mind*, November 8, 2022, <https://www.verywellmind.com/what-is-sociocultural-theory-2795088>.

<sup>43</sup> Ibid.

Lastly, Social Learning Theory developed by Albert Bandura can be applied to teaching DHH students. Bandura suggested that humans learn new behaviors or skills by observing and emulating other human beings.<sup>44</sup> This theory emphasizes the significance of learning by observing, so it can lead to obtaining knowledge and skills. DHH students can observe the teacher when playing instruments and start mimicking the teacher's behavior thereafter.

### **Characteristics of Deaf and Hard of Hearing Students**

Depending on the level of hearing loss, DHH can be categorized as a mild loss, moderate loss, and severe loss. A mild loss person would perceive face-to-face conversation with a little difficulty and may not be able to understand the contents when more than one person speaks at once, but still, oral conversation is possible. A moderate-loss person can hear without a hearing aid if the other person speaks loudly and clearly. For a moderate-loss person, low-frequency voice would be easier to detect than a higher frequency. A person with severe loss might hear voices only when they are loud enough and close to their ear. To amplify communication, sign language, and visual cues are necessary to continue the conversation. For profound loss people, they would only feel vibrations and not be able to hear any sounds. With help from hearing aids, some sounds might be audible, but without sign language, communication is impossible.<sup>45</sup>

According to Hash, the loss of auditory issues is due to conductive or sensorineural damage. Conductive hearing loss is damage to the middle or outer ears due to disease, ear infections, or accidents. To correct this condition, hearing aids are used in many cases. Impaired sensitivity to sound refers to sensorineural hearing loss which is because of abnormalities or

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<sup>44</sup> Saul Mcleod, "Albert Bandura's Social Learning Theory," *Simply Psychology*, February 1, 2024, <https://www.simplypsychology.org/bandura.html>.

<sup>45</sup> Hash, "Teaching Instrumental Music to Deaf and Hard of Hearing Students."

damage to the sensory cells at the inner ear or the nerves. This condition might be affected by genetic, prenatal, birth, or postnatal reasons. Moreover, hearing aids would not be any help since the distortion of sound is so great. Furthermore, combining conductive and sensorineural damage creates mixed hearing loss. Some might have CIs, an electronic device attached closely to the auditory nerve to provide artificial stimulation. However, CIs do not guarantee accurate pitch or natural timber due to sound distortion created by the implant.<sup>46</sup>

### **Before Starting Music Classes for DHH Students**

Understanding the characteristics and abilities of DHH students is essential in lesson and instruction planning to accommodate students' needs in the music classroom. Each student has unique conditions and abilities that need to be recognized and provide modifications like the physical environment of the classroom, adjusting teaching methods, and appropriate instrument choices.<sup>47</sup> Children with disabilities work better with daily routines, so it is important to set up routines with the help of a visual schedule where it can be seen by every student.<sup>48</sup> The other thing to consider is that some DHH students have below-grade-level achievement. Oftentimes, DHH students have other disabilities than DHH that obstruct their learning ability and may have physical difficulties or walking with a different gait or bent shoulders.<sup>49</sup> But in some cases, DHH students show big advancement in understanding movement changes as their peripheral visual stimuli get enhanced since their auditory abilities decreased.<sup>50</sup> This research paper will examine

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<sup>46</sup> Hash, "Teaching Instrumental Music to Deaf and Hard of Hearing Students."

<sup>47</sup> Ibid.

<sup>48</sup> Caroline Guardino, and Joanna E. Cannon. "Theory, Research, and Practice for Students Who Are Deaf and Hard of Hearing with Disabilities: Addressing the Challenges from Birth to Postsecondary Education," *American Annals of the Deaf* 160, no. 4 (Fall 2015): 347-355, <https://www.jstor.org/stable/26235226>.

<sup>49</sup> Ham et al., "Deaf and Hard of Hearing Awareness Training: A Mentor-Led Workshop."

<sup>50</sup> Guan, and Smolen, "Visual-Motor Integration in Language Learning Among Deaf and Hard of Hearing Children."

three cases of music education in different settings: preschool, high school, and school for DHH students to analyze data.

### **Montiegel's Case of Integrating Music for a DHH Student at Preschool**

This case study is about the journey of a preschool director who had a student with profound hearing loss who was wearing cochlear implants at preschool. The principal has always implemented music in her school for students with mild hearing loss. Since the principal had to teach a young DHH child with CIs, she decided to use more musical activities in the language and literacy curriculum. According to Nelson, due to technological help like hearing aids, CIs, bone-anchored hearing devices, and FM systems, DHH children have more access to sound in developing listening and spoken language, as much as 97% more than before.<sup>51</sup> A greater number of babies are now equipped with digital hearing aids as little as a month old, and more than 38,000 children got CIs in 2013 in the United States.<sup>52</sup> However, children with hearing loss still have delays in receptive, expressive speech and learning, causing decreased vocabulary development for them. The disadvantages of learning affect DHH students' academic achievement, which eventually leads to social isolation and poor self-esteem. However, early detection of infants' hearing problems can weave the way to implement proper hearing technology and provide potential methods for DHH students to gain spoken language to communicate with hearing friends and eventually be able to mainstream neighborhood schools.<sup>53</sup>

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<sup>51</sup> Nelson et al, "Embedding Music into Language and Literacy Instruction for Young Children Who Are Deaf or Hard of Hearing."

<sup>52</sup> Ibid.

<sup>53</sup> Montiegel, "'Use Your Words': Vocalization and Moral Order in an Oral Preschool Classroom for Deaf or Hard-of-Hearing Children."



Preschool serves an important role in children as it provides the beginning academic foundation for young children to make a smooth transition to kindergarten and upcoming upper-grade levels. Young children start learning cognitive, language learning abilities, and social skills, and this is the same for DHH students to live together within the hearing communities. Well-planned teaching methods and great support for DHH students can amplify helping to acquire their language and literacy skills in daily preschool classrooms.<sup>54</sup>

It is important not to presume that just because DHH children are wearing hearing aids or CIs does not mean that their hearing ability is almost the same as hearing children. DHH students still struggle to hear clearly with secondary devices, so continuous auditory training to be better equipped with receiving skills of hearing with devices is necessary. DHH children can expand vocal intonation through pitch and rhythm-related activities. The principal discovered that DHH students' language and literacy skills thrived when the curriculum was with music-based auditory activities. When DHH students were laid with ongoing music implication, their auditory understanding and vocal skills improved, which led to obtaining better vocabulary development and literacy concept skills. Thus, well-planned music lessons can be helpful for DHH students and, at the same time for hearing students, too.<sup>55</sup>

### **Hash's Case for High School Music Ensemble**

Phillip Hash has taught high school band and orchestra programs and invited DHH students to mainstream the class with hearing students. Hash understands that DHH students are capable of maintaining steady beats that are often better than his hearing students. DHH students would struggle to replicate rhythm patterns without proper modifications and improvements but

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<sup>54</sup> Ibid.

<sup>55</sup> Montiegel, "'Use Your Words': Vocalization and Moral Order in an Oral Preschool Classroom for Deaf or Hard-of-Hearing Children."

would be successful in music-making with well-guided lessons. An important fact to remember is that DHH students are good with lower frequencies than higher frequencies. The optimal range Hash suggests is B below middle (B3) to a twelfth above F (F5), which is similar to Mezzo-Soprano's range, A3 – A5.<sup>56</sup>

According to Hash's findings, the most outstanding benefits of music education are language acquisition. Implementing rhythm, accents, tempo, and other musical elements leads to educational goals of the structure of language. Joining a music ensemble inspires positive support for reading and writing, which helps build a positive self-image and also enhances body coordination using rhythmic exercises. DHH students can build social skills by increasing interactions with other hearing students while performing in the ensemble. DHH students are introduced to different cultures and genres that are tightly connected to social science curriculums. Above all, DHH students can learn about rhythm, harmony, melody, form, expressions, and many other aspects of music while joining the ensemble. Hash suggests that DHH students can be part of music-making through good teaching methods, student's frequent practices, and support from families and teachers using visual, tactile, and movements rather than singing or music listening.<sup>57</sup>

### Getting Music Classroom Ready

First, Hash tried to make the music classroom more friendly to DHH students. Some DHH students would get upset if they are not able to hear or understand the teacher, so making a music classroom optimal for DHH students is important. Extra sounds inside and outside of the classroom would not help DHH students to hear clearly. This includes unnecessary talking and movement, even including lights, heaters, and air conditioners. Installing carpets and drapes will

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<sup>56</sup> Hash, "Teaching Instrumental Music to Deaf and Hard of Hearing Students."

<sup>57</sup> Hash, "Teaching Instrumental Music to Deaf and Hard of Hearing Students."

help to eliminate excessive noise and provide good lighting for DHH students would be better. The spot where the teacher will be standing should not be in front of the window or on a bright background where the teacher's facial expression would not be detected. Hash explains that a good distance for speech reading is about 6 feet. If a DHH student plays the instrument that needs to be at the end of the row, then he or she must be placed according to the optimal point for hearing aids. DHH students would learn best in small, similar instrumental groups in a circle or semi-circle so they would be able to see other students' faces. For the ones with hearing aids, being too loud might be problematic, and they would need to turn it down when practicing. If there is an audiologist available in the district, the teacher needs to discuss the volume of hearing aids during rehearsals.<sup>58</sup>

It would be ideal for the teacher to face DHH students as much as possible by standing in one place. The tone of the voice should be low and slow when addressing DHH students. Sometimes, DHH students would nod and smile, making the teacher assume that they understand the concept, but that would not be always the case. Therefore, grabbing students' attention and keeping good eye contact is essential during conversations. Usage of body language, preplanned signs, and good use of visual aids will be effective strategies. It is also useful to write objectives and terms on an overhead. To be able to understand DHH students' progress, constant ongoing assessment is necessary. As a part of the assessment, the teacher can assign music composition to evaluate their progress in rhythm notation, and improvisation for more advanced levels.<sup>59</sup>

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<sup>58</sup> Ibid.

<sup>59</sup> Hash, "Teaching Instrumental Music to Deaf and Hard of Hearing Students."

### Instrument Selections

Instrument selection would be the top consideration as educators place DHH students in the ensemble for their success. Instruments that can be played closely next to the instrument would be the best, as DHH students can detect vibrations to feel – the harp and guitar. For the same reason, the electric bass guitar could be used for concerts and jazz bands as it emulates enough vibrations. Hash believes violin and cello could be implemented with some challenges as these instruments do not have identified frets, and students might experience difficulties with the intonations.<sup>60</sup>

Among woodwind instruments, clarinet and saxophone might be good suggestions as they produce different notes with different fingerings and have good resonance with a big range. If DHH students want to explore more, they can try the bass clarinet or tenor saxophone, as they have lower frequencies. From brass instruments, trumpet, euphonium, and tuba would work as well. However, the slide trombone and French horn are not recommended as these instruments are hard to differentiate pitches. Percussion instruments would suit DHH students well, and the vibrations of instruments would carry to students. In this process, a teacher's good modeling is vital, playing steady beats, as DHH students can learn from watching the teacher. It would be ideal to start on low-range drums so that students can feel the vibrations. When enough observations are done, students can begin playing the pattern introduced by the teacher and repeat the process. DHH students can try to feel vibrations coming from the table, stand, or floor near the instrument. If the student has severe or profound hearing loss, they would be able to feel the vibrations by wrapping their legs around percussion instruments like a bongo or conga drum.<sup>61</sup>

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<sup>60</sup> Ibid.

<sup>61</sup> Hash, "Teaching Instrumental Music to Deaf and Hard of Hearing Students."

If DHH students have a desire to select their own instruments against certain challenges, the teacher should be able to accommodate as much as possible for students to play desired instruments, as this will boost their motivation to learn. Besides, participating in the band or orchestra would already be a great challenge for DHH students, and they need support from the teachers, peers, parents, and other staff from school. It would be great if there were role model musicians who had overcome challenges and became famous and professional. Moreover, the instructor needs to be aware that students with disabilities need a ton of support from school administrators, but many times their support is not enough. So, it is up to the music teacher to provide extra support and alert school officials of the need for music for DHH students and students with disabilities. Once the teacher has successfully implemented the program for DHH students, the rewards are great and valuable for students, teachers, and peers, too.<sup>62</sup>

### **Kyriakou's Case**

#### **At the Beginning**

Karen Kyriakou is a renowned music educator and composer in Australia and the music teacher at Austrians' school for DHH students.<sup>63</sup> When she was appointed to teach DDH students, Kyriakou first started focusing on vibrations and rhythm, but later, she noticed that she had skipped some steps before properly implementing the lesson. Kyriakou realized that she had no understanding of Deaf culture and the role of music in their community. She did not have enough information regarding the students' condition. Since her students have severe to profound hearing loss, their main method of communication is an Auslan (Australian Sign Language) through interpreters. Kyriakou saw that because her students needed to see what she

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<sup>62</sup> Ibid.

<sup>63</sup> ANAM, "Karen Kyriakou," <https://anam.com.au/about/artists/karenkyriakou>.

was instructing, all students' eyes were on the interpreter, not on her. Kyriakou came to an understanding that she needed to learn how to sign Auslan to communicate directly with students to develop relationships with them.<sup>64</sup>

Kyriakou first tried to teach every student at the same pace, which was very slow for some students. She wanted to bring everyone to the same page before moving to the next lesson, but this method gave some students spare time due to the lack of activities, which made them bored. Kyriakou urges another important fact for other educators to remember: many DHH students experience other disabilities besides hearing problems. According to Jackson, between 25-51% of deaf students have one or more disabilities besides being deaf.<sup>65</sup> So, the teacher needs to be mindful of accommodating DHH students of deafness and ready to support other disabilities for each student.<sup>66</sup>

#### Collecting More Information on DDH Students

Kyriakou agrees with Hash's statement that DHH children require special needs and different approaches when learning educational materials. Teachers need to consider that many DHH children were born deaf and were not exposed to hearing people's conversations. Obtaining speaking skills is a long and intricate journey for early age children, and for DHH students, literacy level and development might vary, most likely lower than hearing students.<sup>67</sup>

Kyriakou started learning Auslan to communicate with her students, and she discovered that there is not much vocabulary related to musical terms. She realized that she was the one who needed to improvise and come up with reasonable phrases. Furthermore, DHH students at her

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<sup>64</sup> Kyriakou, "Teaching Music to Deaf Students: A Personal Reflection."

<sup>65</sup> Jackson et al, "Deafness and Diversity: Early Intervention."

<sup>66</sup> Kyriakou, "Teaching Music to Deaf Students: A Personal Reflection."

<sup>67</sup> Ibid.

school come from multicultural backgrounds. Some children are from deaf families, so they have no verbal experience at all. Some students are from English-speaking families, and some families use languages other than English. Moreover, other families utilize Auslan in their household, and some do not use Auslan whatsoever. So Kyriakou wanted to learn more about DHH students' community, culture, and identity, including families, parents, caregivers, and interpreters. The deaf community is proud of themselves and considers their condition not as a disability but as a common thread in their lives. Nonetheless, some parents do not want to expose their children to DHH due to social barriers their children might face and like to just depend only on technology without revealing their DHH identities.<sup>68</sup>

#### For Young Children

Kyriakou tries to place many musical experiences that DHH students can encounter in numerous different ranges of proactive exposure. She switched her method of teaching from explaining with the help of interpreters to only mime and modeling without saying anything. So, the need for interpreters was no longer a problem, and students started focusing only on the teacher. She first used 'watching and copying' activities such as clapping, incorporating movements, using body percussion, and hands-on playing in small drums by good modeling followed by repeating. There are several constructional materials that are suitable for music classrooms which help carry vibrations well for DHH students to feel.<sup>69</sup>

Since DHH students cannot differentiate the volume of sounds, they tend to play instruments very loudly which can make other students who wear hearing aids uncomfortable. Kyriakou first started showing students by soft rubbing movement on the surface of hand drums

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<sup>68</sup> Kyriakou, "Teaching Music to Deaf Students: A Personal Reflection."

<sup>69</sup> Ibid.

then moved on to the gentle finger tapings where everyone can play softly. If some students played too loud or too fast, she would go back to hand-rubbing exercises. Later, she implemented this method as a warm-up activity. Kyriakou wanted to teach students how to control their actions and behaviors. In a challenging classroom setting, restraining oneself from going out of control was the one she needed to teach first.<sup>70</sup>

As Kyriakou was teaching music lessons, students started to show body consciousness, which led to better gross and motor skills. DHH students perceived how to keep a steady beat, play different rhythmic patterns, melodic exploration, and create music. Students were able to remember movement patterns, dance activities, and simple drum patterns. Young DHH students would eventually advance to more options using shakers and hand drums with difficult rhythmic patterns. Change in the tempo would engage students more in a circle and action dances, too. Kyriakou also emphasizes the importance of having good eye contact with DHH students while teaching as keeping eye contact helps students to understand and follow directions better during class time.<sup>71</sup>

### The Junior Years

Kyriakou says the content of her lesson plans for DHH students is almost the same as what she would implement in a regular music classroom for hearing students. DHH students just need more time to congest content as they need to feel, see, or touch instruments. For junior students, she would start class with action songs and begin teaching easy songs in Australian sign language. Body movements are still effective in developing a steady beat and memory with

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<sup>70</sup> Kyriakou, "Teaching Music to Deaf Students: A Personal Reflection."

<sup>71</sup> Ibid.



many practices. Since younger students start with circle dances, junior students can advance to folk dances in rows with partners.<sup>72</sup>

In junior year, students can start surveying mallet instruments like the xylophone. For DHH students, distinguishing between ‘high’ and ‘low’ might be a bit challenging as they might understand it as ‘more’ or ‘less.’ So, Kyriakou put color stickers on the keys to tie to the same-colored note names on the material they learn. Then, she introduces recorders after xylophone lessons. Teaching recorders may be a little challenging as DHH students need good fingering coordination as they play notes. However, recorders are affordable and are the first instrument that is not in the percussion family. Recorders are something that students can explore before stepping into different woodwind instruments, too. Some students were not able to hold the recorder properly due to other disabilities they have. So, Kyriakou accommodated this issue by putting sticky tape on the back hole of the recorder, so DHH students could only focus on the front holes. Some students did not have any experience with controlling their breathing flow. If they put in too much air, the recorder would produce harsh sounds. To practice their airflow, Kyriakou let students blow on a tissue to see how much air is needed to play.<sup>73</sup>

### The Senior Years

By reaching the upper-grade levels, students could play with an instructor's beat and follow rhythmic patterns. Kyriakou starts implementing ukuleles lessons and Auslan sign language choir. For Ukuleles, she would use colored dots just like the way they worked on xylophones. Kyriakou teaches different strumming patterns with simple chords like C, F, Am, and G. To make things easy for students, Kyriakou sometimes rewrites music to give enough

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<sup>72</sup> Ibid.

<sup>73</sup> Kyriakou, “Teaching Music to Deaf Students: A Personal Reflection.”

time for students to switch between chords. Auslan Choir is a sign language choir ensemble. Even though Kyriakou learned the basic Auslan skills to communicate with students, she is not an expert in interpreting the text of a song. So, she would discuss how to effectively transcribe the texts into Auslan language with Deaf staff members in interpreting the song. There are many options and grammatical problems to reflect when interpreting a song into Auslan. Each interpreter would suggest different ways to express each phrase, so it is a long work with a lot of consideration to put in. Auslan choir music also needs to consider how the sign would express the music, style, tempo, and rhythm. Kyriakou suggests that students should not physically sing out the songs when performing but rather play tracks to accompany their signing.<sup>74</sup>

### **Assessing DHH Students**

To measure students' understanding of concepts, educators need to assess students by formative and summative methods. For DHH students, ongoing assessments are vital as it is challenging to figure out students' progress to teachers and students themselves. Among educators, assessing DHH students has always been difficult. There have been many tries to establish well-founded, dependable, and significant ways to assess DHH students. Previously, due to insufficient amount of knowledge and not being able to accommodate students' needs, there were many failures leading to misjudging DHH students as being mentally disabled and sending them to mental institutions.<sup>75</sup>

The same quality of State Standardized tests, which were designed for hearing students, were given to DHH students and presented so many challenges for DHH students. School and multidisciplinary teams need to identify ways to accommodate individual DHH students' needs

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<sup>74</sup> Kyriakou, "Teaching Music to Deaf Students: A Personal Reflection."

<sup>75</sup> Neild, and Fitzpatrick, "Overview of Assessment for Deaf and Hard of Hearing Students."

so they can accomplish success. There are other details to consider when assessing DHH students. These details depend on the degree of hearing loss, the primary language used at home, age, other disabilities, race, gender, socioeconomic status, and other conflicts.<sup>76</sup>

Neild suggests that to overcome language differences and developmental issues, the school needs to implement proper protocols for DHH students. Adjusting variables are needed for DHH students to have similar expectations and scores that will close the gap between DHH students and hearing students in many ways. Generally, DHH students' academic level is lower than typical hearing students. So, multidisciplinary teams need to help DHH students to identify disability eligibility, develop an individualized education plan (IEP), determine the right placement in the least restrictive environment (LRE), plan and guide instruction, monitor student progress, and provide helpful feedback to DHH students and families. Teachers also need to assess DHH students daily regarding rules, routines, and assignments to reflect and modify the lessons.<sup>77</sup>

One of the great ways to assess DHH students is to utilize Universal Design for Learning (UDL). UDL encourages accommodating curriculum development, teaching, and delivery by multiple means of representation, action and expression, and engagement.<sup>78</sup> Educators should consider these factors when preparing instructions by channeling multiple faucets to teach and then providing multiple ways to assess students' understanding. Teachers should also provide ways for students to achieve their personal goals and self-evaluate and monitor their work for better accomplishment. As students show their progress, teachers can recognize the gap and adjust instructions for students' success. Possible ways to assess students during classroom

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<sup>76</sup> Ibid.

<sup>77</sup> Neild, and Fitzpatrick, "Overview of Assessment for Deaf and Hard of Hearing Students."

<sup>78</sup> Ibid.

instruction include journals, quick writes, cooperative learning activities, classroom discussions, and filling out graphic organizers.<sup>79</sup> For DHH students in the music classrooms, daily formative assessments could be done by showing performing skills students obtained and musical knowledge that has been collected over time. These formative assessments can add up to make up summative assessments at the end of the year, and, of course, appropriate accommodation should be provided according to their hearing levels and other disabilities. Again, educators need to be patient so that DHH students can achieve their goals. However, it just takes more time for DHH students than hearing students, and possibly, the expected goals might not happen in some academic years.

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<sup>79</sup> Ibid.

## **CHAPTER THREE: METHODS**

### **Overview of Project Design**

This research project uses qualitative methods. The curriculum project is to educate and guide teachers on how to implement instruments for DHH students. This project is based on two steps of research. The first step is to research a collective qualitative case study of the experiences of educators who have successfully taught music to DHH students. This process included gathering, analyzing, and synthesizing existing research articles on DHH education and music learning.

Next, based on the research, a 12-week online course titled “Teaching Deaf and Hard of Hearing Students Musical Instruments in General Music Class” was designed. This course equips college students and current educators with the necessary knowledge and skills to create inclusive and effective music programs for DHH students.

The curriculum project addresses knowledge about how to teach DHH students musical instruments exclusively or DHH students being mainstreamed into general education classrooms. The researcher immersed in existing research on DHH students, covering their unique learning styles, challenges, musical aptitude, and appropriate pedagogical approaches. Based on Montiegel, Hash, and Kyriakou’s case studies, the researcher was able to gain an understanding of DHH students, their community, and the daily challenges DHH students encounter. Despite their limitations, DHH students were still able to learn music education when they were appropriately accommodated. After drawing conclusions from case studies in this research, the curriculum project of 12-week lesson plans was built to educate teachers with lesson plans, learning objectives, and assessment strategies.

The curriculum project contains theoretical approaches and fundamental knowledge of DHH students as to how to plan lessons and utilize resources in the music classroom. The

curriculum starts with body percussion and basic percussion instruments, providing a foundation for further exploration. It also outlines various assessment methods to ensure that both educators and students can track progress effectively. The curriculum serves as a beginning of new perspectives of teaching and encourages educators to introduce other instruments based on their expertise and classroom resources. This project empowers educators to create inclusive and accessible music classrooms for all students.

### **Relationship of Literature to Project Design**

There is a deficit in research about teaching music to DHH students, especially teaching musical instruments to DHH students. Researchers mainly focus on language and literature development skills that often neglect the potential of music to enrich DHH students' lives. Many schools for the Deaf satisfy Visual and Performing Arts requirements with art and media classes, leaving a gap in music education for DHH students. This gap comes from a lack of knowledge and experiences of educators since they may feel hesitant to integrate DHH students into mainstream music classes. However, music education is essential for all children's development, and DHH students should have equal access to its benefits.

### **Research Questions**

The first research question for this curriculum project is, "What are the challenges for Deaf and Hard of Hearing students to learn how to play musical instruments? To answer this question, an extensive amount of research has been done about DHH communities, families, and different levels of deafness students experience. DHH students may have additional disabilities that require specific considerations. A comprehensive understanding of their individual needs is vital for successful learning.

The second question is “How can music educators make music programs more inclusive and accessible for Deaf and Hard of Hearing students?” Music teachers can create visual cues to demonstrate hand positions, posture, and facial expressions. They can also collaborate with others, such as special educators, sign language interpreters, and audiologists, for clear communication and support DHH students. Teachers can also use assistive technology that helps DHH students feel the vibrations.

## CHAPTER FOUR: RESEARCH FINDINGS

This research studies literature reviews and data to explore the importance of music education even for Deaf and Hard of Hearing (DHH) students, understanding the challenges they face, and effective strategies to teach them. Music education fosters creativity, enhances academic instruction, and promotes emotional, social, and academic development. Moreover, music can support language acquisition in DHH students by using rhythm, accents, tempo, and repetition. Furthermore, music education can contribute to building a positive self-image for DHH students.

Students with hearing problems experience varying degrees of hearing loss, which impacts their ability to perceive and participate in music activities traditionally designed for hearing students. Another side effect of hearing loss is language deprivation due to limited exposure to spoken language or sign language. Moreover, sensorimotor integration, which is the process of combining sensory information with movement, is missing for early language acquisition. Above all, DHH students may face social exclusion, communication barriers, and lower self-esteem because of their hearing loss.

When teachers plan lessons, they need to consider DHH students' characteristics and needs, along with appropriate teaching methods in instrumental education. Also, the physical environment should be optimally modified to minimize extra noise and optimize visual communication. Utilizing visual aids, overhead projectors, and clear communication methods are recommended. Therefore, facing students and maintaining eye contact is essential for learning. Assistive technologies like hearing aids, cochlear implants, and real-time sign language transcription systems can boost DHH students' access. Similar lesson plans for hearing students can be implemented, but they need to be modified to involve more movement and tactile sense to strengthen the lesson. When selecting an instrument for DHH students, instruments that produce



strong vibrations or require minimal pitch discrimination are highly recommended, like percussion instruments, guitars, or possibly some woodwind instruments.

Hash explains that numerous DHH students have participated in instrumental music programs for over a century which shows the potential DHH students have and can excel in music with proper support and modifications.<sup>1</sup> Music education offers a valuable and enriching experience for both hearing students and DHH students. By providing DHH students' needs and creating inclusive and accessible environments, students can unlock their musical potential and foster a deeper understanding of music. At the same time, this experience can be significant and meaningful for the teacher and peers.

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<sup>1</sup> Hash, "Teaching Instrumental Music to Deaf and Hard of Hearing Students."

## **CHAPTER FIVE: DISCUSSION**

### **Status of Music Education for DHH Students**

There should be growing recognition of the benefits of music education for DHH students, as there are limited resources available for this topic. People are developing more innovative assistive technologies to make classrooms accessible and to support. To cater to the diverse needs of DHH students, more studies need to be done at all ages of DHH students. Inclusion of DHH students is still limited due to various reasons; schools need to work to over this problem. More advocacy for music education is needed to provide every student with the opportunity to experience music.

### **Limitations**

Despite noticeable progress in supporting DHH students in music classrooms, there is still a lack of accessible music education programs specifically designed for DHH students. Students face a variety of levels of hearing loss to produce one kind of lesson plan but need to adjust as the teacher teaches. The lack of teacher training also prohibits teachers from teaching music to DHH students. Lastly, assistive technologies are being developed to help DHH students in educational learning environments that are not yet widely used.

### **Recommendations for Future Study**

Many music educators might not have the necessary training or experience to effectively teach DHH students, so further study can investigate any available teacher training programs to teach DHH students. There should be more schools implementing music programs for DHH students that can provide future research.

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## APPENDIX A: CURRICULUM

### ***COURSE SYLLABUS***

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**STUDENT NAME:** ANGELINA KIM

**NAME OF COURSE:** *TEACHING INSTRUMENTS TO DEAF AND HARD OF HEARING STUDENTS*

#### **COURSE DESCRIPTION**

This course helps Music Education major students guide through integrating and creating instrumental lesson plans for Deaf and Hard of Hearing students in general music classrooms. Students will be acquiring knowledge about Deaf and Hard of Hearing students and build special curricula to teach Deaf and Hard of Hearing students to participate in music-making.

#### **RATIONALE**

Music education has a great impact on a student's life, and future music educators should be ready to teach in ever-changing, diverse classroom settings, including students with disabilities. Music classes provide academic and emotional benefits to students with disabilities. This course focuses on deaf and hard of hearing students and how to teach musical instruments in a general music classroom. This class will guide students through making a safe and accessible classroom for deaf and hard of hearing students, which will help them build a lifelong habit of music making.

#### **I. PREREQUISITES**

- A. Must have completed MUSC 364 General Music Education

#### **II. REQUIRED RESOURCE PURCHASE(S)**

- A. Carrico, Alexandria, and Katherine Grennell. *Disability and Accessibility in the Music Classroom: A Teacher's Guide*. New York: Routledge, 2022. ISBN: 9781032119366.

- B. Holcomb, Thomas K., *Introduction to Deaf Culture*. 2<sup>nd</sup> ed. New York: Oxford University Press, 2023. ISBN: 9780197503232.
- C. Watson, Linda, Stephen Powers, and Susan Gregory. *Deaf and Hearing Impaired Pupils in Mainstream Schools*. New York: Routledge, 2012. ISBN: 1853465887.

### **III. ADDITIONAL MATERIALS FOR LEARNING**

- A. Laptop or desk top computer
- B. Internet access
- C. CANVAS
- D. Microsoft Word
- E. Recording Device (laptop, desktop camera, or phone)

### **IV. MEASURABLE LEARNING OUTCOMES**

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

- A.** Underline the difference between deaf and hard of hearing people and describe their community.
- B.** Identify the characteristics of deaf and hard of hearing students and explore possible instrument options for students.
- C.** Practice the proper ways to play and demonstrate for students by bringing out the most visual ways possible.
- D.** Examine different approaches to teaching instruments and implement supporting technologies.
- E.** Evaluate planned teaching methods by recording and reflecting on effectiveness and accessibility.

### **V. COURSE REQUIREMENTS AND ASSIGNMENTS**



**A. Text reading and lecture presentations**

**B. Discussion (10)**

Discussions are used to help students collaborate with other classmates. The student is required to create a thread for each prompt by 11:59 p.m. (ET) on Thursday. Each thread should be 350-400 words, with one scholarly source and one quote from the Bible. After posting the thread, the student is to replay at least two other classmates' threads by 11:59 p.m. (ET) on Sunday. Each reply should be 150-200 words.

**C. Deaf and Hard of Hearing Community Paper Assignment**

After reading chapters 1-3 from Holcomb's *Introduction to Deaf Culture*, the student will write a paper summarizing concepts in the material. This paper should be at least four pages, no more than six pages, with a title and bibliography page. This assignment must have at least three scholarly references and two quotes from the Bible in the current Turabian format. Course textbooks can be used as sources.

**D. Curriculum Project Assignments (6)**

The students will select six musical instruments that are suitable for Deaf and Hard of Hearing students in general music classes. The students will create six lesson plans for each instrument. The Curriculum Project will focus on introducing musical instruments to students with disabilities in the praxial music education approach. While creating lesson plans, the student must consider how to accommodate and provide accessibility for each lesson. The Curriculum Project will help students understand the different teaching methods from the General Education music classroom and facilitate learning methods developed for Deaf and Hard of Hearing students. The students will turn in assignments on 6 different instruments with scholarly references in the current Turabian style.

**E. Quizzes (4)**

Each quiz will cover the reading materials in this course. The quizzes will be open-book and have 25 questions of multiple-choice and true/false questions. There will be a 1-hour time limit, and students can take it multiple times. The highest score will count toward the grade.

**F. Final Project**

Each student will gather and make a portfolio of six lesson plans on different instruments and then record four videos from their lesson plans. The recording should not exceed ten minutes. The student is expected to show only the partial part of their lesson plans.

## **VI. COURSE GRADING AND POLICIES**

## A. Points

**Discussion (10 at 50 pts each)**

Discussion: Introduce Yourself	50
Discussion: Deaf Community I	50
Discussion: Accessible and Inclusive	50
Discussion: Disabled Musician I	50
Discussion: Disabled Musician II	50
Discussion: Conductive Hearing Loss	50
Discussion: Deaf Community II	50
Discussion: More Instruments	50
Discussion: Cochlear Implants	50
Discussion: Record and Feedback	50

**Deaf and Hard of Hearing Community Assignment      200****Curriculum Project Assignments (6 at 100 pts each)**

Lesson Plan #1	100
Lesson Plan #2	100
Lesson Plan #3	100
Lesson Plan #4	100

Lesson Plan #5	100
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Lesson Plan #6	100
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**Quizzes (4 at 100 pts each)**

Quiz #1: Accessible and Inclusive	100
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Quiz #2: Sign Language	100
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Quiz #3: Cochlear Implants	100
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Quiz #4: Universality in Deafness	100
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<b>Final Project</b>	<b>300</b>
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**Total: 2000**

**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**

All assignments are expected to be turned in on time. If the student is unable to complete an assignment on time, then the student must contact the instructor immediately by email.

Without contacting the instructor, each assignment will get a 10% deduction within one week after the due date. Assignments submitted more than one week and less than two weeks late will receive a 20% deduction. Assignments submitted after two weeks will not receive any points unless the student is under special circumstances (e.g. death in the

family, personal health issues). Please contact your instructor immediately to discuss the matter further.

## CURRICULUM PROJECT: ANALYSIS CHART

### PART I: CURRICULUM INFORMATION

<b>Student: Angelina Kim</b>	<b>Course for which you are creating a curriculum:</b> Teaching Deaf and Hard of Hearing Students Musical Instruments in General Music Classroom
<b>Required Textbook for Class:</b>	
<p>Carrico, Alexandria, and Katherine Grennell. <i>Disability and Accessibility in the Music Classroom: A Teacher's Guide</i>. New York: Routledge, 2022. ISBN: 9781032119366.</p> <p>Holcomb, Thomas K., <i>Introduction to Deaf Culture</i>. 2<sup>nd</sup> ed. New York: Oxford University Press, 2023. ISBN: 9780197503232.</p> <p>Watson, Linda, Stephen Powers, and Susan Gregory. <i>Deaf and Hearing Impaired Pupils in Mainstream Schools</i>. New York: Routledge, 2012. ISBN: 1853465887.</p>	
<b>Identify the problem:</b>	
The students must show the ability to identify deaf students' characteristics and be able to accommodate creating an instrumental class in general music education class.	
<b>Who are the learners and what are their characteristics?</b>	
<p>Senior level college students who are in Music Education major between ages 19-22</p> <p>Pre-requisites*</p> <p>*Must have completed MUSC 364 General Music Education</p>	
<b>What is the new desired behavior?</b>	
The students will create 6 instrumental lesson plans on provided templets for deaf students.	
<b>What are the delivery options?</b>	
This class is an asynchronous learning course. Students will learn course materials in their own time for 12 weeks.	
<b>What are the pedagogical considerations?</b>	

The course will address the different classroom settings and instructional methods for deaf and hard of hearing students. This course is designed to invite students with disabilities, especially deaf and hard of hearing students, to acquire musical skills to perform instruments.

**What learning theory applies to your curriculum? Why?**

Social learning theory will be used in this course to create a classroom where to guide deaf and hard of hearing students to observe, imitate, and follow a teacher in instrumental performing. As a student explores different methods, the student will implement, reflect, and experiment that will give the student experience and application.<sup>1</sup>

## Part II: Learning Outcomes

### Learning Outcomes

**At the end of the course, the student will be able to:**

1. Underline the difference between deaf and hard of hearing people and describe their community.<sup>2</sup>
2. Identify the characteristics of deaf and hard of hearing students and explore possible instrument options for students.<sup>3</sup>
3. Practice the proper ways to play and demonstrate for students by bringing out the most visual ways possible.<sup>4</sup>

<sup>1</sup> Guardino and Cannon, "Theory, Research, and Practice for Students Who are Deaf and Hard of Hearing with Disabilities: Addressing the Challenges from Birth to Postsecondary Education."

<sup>2</sup> Angelides, Panayiotis, and Christiana Aravi. "A Comparative Perspective on the Experiences of Deaf and Hard of Hearing Individuals as Students at Mainstream and Special Schools." *American Annals of the Deaf* 151, no. 5 (Winter 2006/2007): 476-487. <https://www.jstor.org/stable/26234409>.

<sup>3</sup> Debra M. Shaver, Marc Marschark, Lynn Newman, and Camille Marder, "Who is Where? Characteristics of Deaf and Hard-of-Hearing Students in Regular and Special School," *Journal of Deaf Studies and Deaf Education* 19, no. 2 (April 2014): 203-219, <https://doi.org/10.1093/deafed/ent056>.

<sup>4</sup> Music Mark, "How to Make Music Activities Accessible for Deaf Children and Young People," accessed March 29, 2004, [https://www.musicmark.org.uk/wp-content/uploads/ndcs\\_how\\_to\\_make\\_music\\_activities\\_accessible.pdf](https://www.musicmark.org.uk/wp-content/uploads/ndcs_how_to_make_music_activities_accessible.pdf).

4. Examine different approaches to teaching instruments and implement supporting technologies. <sup>5</sup>
5. Evaluate planned teaching methods by recording and reflecting on effectiveness and accessibility.

### CURRICULUM PROJECT: DESIGN CHART

- I. **Evaluate the Analysis Chart and Learning Outcomes and include a full twelve weeks of curriculum. Make sure that you include praxial activities for your students.**

<b>Student:</b>  <b>Angelina Kim</b>	<b>Course for which you are creating curriculum: Online Teaching Deaf and hard of Hearing Students Musical Instruments in General Music Classroom</b>		
<b>Concept Statement:</b> To understand and implement musical instruments for deaf and hard of hearing students in general music classes.			
<b>Learning Outcomes</b>  <i>(List in the order you plan to address in 12 weeks)</i>	<b>Content</b>  <i>(What must be learned to reach this objective?)</i>	<b>Learning/Training Activity</b>  <i>(How will you teach the Content?)</i>	<b>Assessment</b>  <i>(How will you know that the student has met the objective?)</i>
1. Underline the difference between deaf and hard of hearing people and	Week 1:  • <b>Reading</b>  Carrico: Chapter 1	Week 1:  • Welcome message from a professor • Pre-taped professor’s lecture - “Welcome to the community”	Week 1:  • Formative Assessment: discussion and reflection - “Please introduce

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<sup>5</sup> Hash, "Teaching Instrumental Music to Deaf and Hard of Hearing Students."

describe their community.	<p>Holcomb: Chapters 1-2</p> <ul style="list-style-type: none"> <li><b>Content</b></li> </ul> <p>Define deaf and hard of hearing culture</p> <p>Week 2:</p> <ul style="list-style-type: none"> <li><b>Reading</b></li> </ul> <p>Holcomb: Chapters 3-4</p> <p>Watson: Chapter 1</p> <ul style="list-style-type: none"> <li><b>Content</b></li> </ul> <p>Identify the deaf and hard of hearing students in your school</p>	<ul style="list-style-type: none"> <li>Google Slides for student's introduction</li> <li>1-page reflection on reading about deaf and hard of hearing culture</li> <li>Read and post replies to 2 students</li> <li>Google Jamboard</li> </ul> <p>Week 2:</p> <ul style="list-style-type: none"> <li>Pre-taped professor's lecture - "Deaf and hard of hearing students" <ul style="list-style-type: none"> <li>Watch "Understanding Deaf Community" (<a href="https://www.youtube.com/watch?v=r1cgCDyDrX4">https://www.youtube.com/watch?v=r1cgCDyDrX4</a>)</li> </ul> </li> <li>1-page reflection on reading about deaf and hard of hearing students</li> <li>Read and post replies to 2 students <ul style="list-style-type: none"> <li>Padlet Activity</li> <li>Google Jamboard</li> </ul> </li> </ul>	<p>yourself to the class. What is your major and main instrument? Have you met any deaf or hard of hearing people before? Please explain your misconceptions about deaf and hard of hearing people and students."</p> <p>Week 2:</p> <ul style="list-style-type: none"> <li>Formative Assessment: discussion and reflection - "Based on your reading, please explain the deaf community."</li> <li>Summative Assessment: Deaf and Hard of Hearing Community Paper Assignment</li> </ul>
2. Identify the characteristics of deaf and hard of	<p>Week 3:</p> <ul style="list-style-type: none"> <li><b>Reading</b></li> </ul>	<p>Week 3:</p> <ul style="list-style-type: none"> <li>Pre-taped professor's lecture - "Making music classroom</li> </ul>	<p>Week 3:</p> <ul style="list-style-type: none"> <li>Formative Assessment: discussion and</li> </ul>



<p>hearing students and explore possible instrument options for students.</p>	<p>Carrico: Chapter 2</p> <p>Holcomb: Chapters 5-6</p> <ul style="list-style-type: none"> <li><b>Content</b></li> </ul> <p>Accessible and Inclusive Applications in the Music Classroom</p> <p>Week 4:</p> <ul style="list-style-type: none"> <li><b>Reading</b></li> </ul> <p>Holcomb: Chapter 7</p> <p>Watson: Chapter 4</p> <ul style="list-style-type: none"> <li><b>Content</b></li> </ul> <p>Practice American Sign Language (ASL) spelling</p> <p>Week 5:</p> <ul style="list-style-type: none"> <li><b>Reading</b></li> </ul> <p>Carrico: Chapter 3</p> <p>Holcomb: Chapter 8</p>	<p>accessible and inclusive”</p> <ul style="list-style-type: none"> <li>Watch “Inclusive Music Making” (<a href="https://www.youtube.com/watch?v=NpM6baT7Bvk">https://www.youtube.com/watch?v=NpM6baT7Bvk</a>)</li> <li>1-page reflection on reading and watching “Inclusive Music Making”</li> <li>Read and post replies to 2 students <ul style="list-style-type: none"> <li>Padlet Activity</li> <li>Watch “About Percussion Instruments” part 1-3 (<a href="https://www.youtube.com/watch?v=Tis9aFSdVG8">https://www.youtube.com/watch?v=Tis9aFSdVG8</a>)</li> </ul> </li> </ul> <p>Week 4:</p> <ul style="list-style-type: none"> <li>Pre-taped professor’s lecture - “American Sign Language”</li> <li>1-page reflection on reading and learning ASL</li> <li>Read and post replies to 2 students</li> <li>Watch “ASL Sentence Structure” (<a href="https://www.youtube.com/watch?v=fDV9Al8Fgjk">https://www.youtube.com/watch?v=fDV9Al8Fgjk</a>)</li> <li>Watch “Learn ASL Alphabet” (<a href="https://www.youtube.com/watch?v=6_gXiBe9y9A">https://www.youtube.com/watch?v=6_gXiBe9y9A</a>)</li> </ul>	<p>reflection - “After your reading this week, provide 3 things you can do to make your classroom accessible and inclusive for deaf and hard of hearing students.”</p> <ul style="list-style-type: none"> <li>Summative Assessment: Quiz #1 - Accessible and Inclusive</li> </ul> <p>Week 4:</p> <ul style="list-style-type: none"> <li>Formative Assessment: Lesson Plan #1</li> <li>Summative Assessment: Quiz #2</li> </ul> <p>Summative Assessment: Quiz #2</p> <p>Week 5:</p> <ul style="list-style-type: none"> <li>Formative Assessment: discussion and reflection - “Based on this week’s learning materials, please pick one disabled musician in Western Art,</li> </ul>
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	<ul style="list-style-type: none"> <li>• <b>Content</b></li> </ul> <p>Recognize disabled composers and musicians in Western Art</p>	<ul style="list-style-type: none"> <li>• Practice the ASL alphabet after watching</li> </ul> <p>Week 5:</p> <ul style="list-style-type: none"> <li>• Pre-taped professor's lecture - "Disabled composers and musicians in Western Art"</li> <li>• 1-page reflection on reading and watching about further finding in disabled composers</li> <li>• Read and post replies to 2 students</li> <li>• Practice the ASL Alphabet by playing the hangman online game (<a href="https://thewordsearch.com/hangman/">https://thewordsearch.com/hangman/</a>)</li> <li>• Watch "Five Ways to Play Boomwhackers" (<a href="https://www.youtube.com/watch?v=Zu5im8Xzy_U">https://www.youtube.com/watch?v=Zu5im8Xzy_U</a>)</li> <li>• Padlet Activity</li> </ul>	<p>and share the musician to the class."</p> <ul style="list-style-type: none"> <li>• Formative Assessment: Lesson Plan #2</li> </ul>
3. Practice the proper ways to play and demonstrate for students by bringing out the most visual ways possible.	<p>Week 6:</p> <ul style="list-style-type: none"> <li>• <b>Reading</b></li> </ul> <p>Carrico: Chapter 4</p> <p>Holcomb: Chapter 9</p> <ul style="list-style-type: none"> <li>• <b>Content</b></li> </ul> <p>Identify deaf artists,</p>	<p>Week 6:</p> <ul style="list-style-type: none"> <li>• Pre-taped professor's lecture - "Deaf artists in popular music"</li> <li>• 1-page reflection on reading and watching about deaf artists in popular music</li> <li>• Read and post replies to 2 students</li> </ul>	<p>Week 6:</p> <ul style="list-style-type: none"> <li>• Formative Assessment: discussion and reflection - "Based on this week's reading materials, please pick one deaf or disabled</li> </ul>

	<p>disabled composers, and musicians in popular music</p> <p>Week 7:</p> <ul style="list-style-type: none"> <li>• <b>Reading</b></li> </ul> <p>Holcomb: Chapter 10</p> <p>Watson: Chapter 2</p> <ul style="list-style-type: none"> <li>• <b>Content</b></li> </ul> <p>Identify students with conductive hearing loss</p> <p>Week 8:</p> <ul style="list-style-type: none"> <li>• <b>Reading</b></li> </ul> <p>Holcomb: Chapters 12-13</p> <ul style="list-style-type: none"> <li>• <b>Content</b></li> </ul> <p>Discuss the diversity in the deaf community</p>	<ul style="list-style-type: none"> <li>• Watch the video (<a href="https://www.youtube.com/watch?v=0FcwzMq4iWg&amp;t=41s">https://www.youtube.com/watch?v=0FcwzMq4iWg&amp;t=41s</a>) <ul style="list-style-type: none"> <li>• Padlet</li> </ul> </li> <li>• Google Jamboard</li> </ul> <p>Week 7:</p> <ul style="list-style-type: none"> <li>• Pre-taped professor's lecture - "Conductive hearing loss"</li> <li>• 1-page reflection on reading and watching about conductive hearing loss</li> <li>• Read and post replies to 2 students <ul style="list-style-type: none"> <li>• Watch the video (<a href="https://www.youtube.com/watch?v=cZYJL9Jg-3k">https://www.youtube.com/watch?v=cZYJL9Jg-3k</a>) <ul style="list-style-type: none"> <li>• Padlet</li> </ul> </li> </ul> </li> <li>• Google Jamboard</li> </ul> <p>Week 8:</p> <ul style="list-style-type: none"> <li>• Pre-taped professor's lecture - "Diversity in the deaf community"</li> <li>• 1-page reflection on reading and watching about diversity in the deaf community</li> <li>• Read and post replies to 2 students <ul style="list-style-type: none"> <li>• Watch the video (<a href="https://www.youtube.com/watch?v=sg48BNjUohw">https://www.youtube.com/watch?v=sg48BNjUohw</a>) <ul style="list-style-type: none"> <li>• Padlet</li> </ul> </li> </ul> </li> </ul>	<p>musician in popular music and share with the class."</p> <ul style="list-style-type: none"> <li>• Formative Assessment: Lesson Plan #3</li> </ul> <p>Week 7:</p> <ul style="list-style-type: none"> <li>• Formative Assessment: discussion and reflection - "Based on this week's learning materials, please identify students with conductive hearing loss and explain."</li> <li>• Formative Assessment: Lesson Plan #4</li> </ul> <p>Week 8:</p> <ul style="list-style-type: none"> <li>• Formative Assessment: discussion and reflection - "Based on this week's reading material, please discuss the diversity in the deaf community."</li> <li>• Formative Assessment: Lesson Plan #5</li> </ul>
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		<ul style="list-style-type: none"> <li>• Google Jamboard</li> </ul>	
4. Examine different approaches to teaching instruments and implement assistive technologies.	<p>Week 9:</p> <ul style="list-style-type: none"> <li>• <b>Reading</b> Holcomb: Chapters 11 Watson: Chapter 3</li> <li>• <b>Content</b> Discuss technological devices</li> </ul> <p>Week 10:</p> <ul style="list-style-type: none"> <li>• <b>Reading</b> Holcomb: Chapters 14-15 Watson: Chapter 5</li> <li>• <b>Content</b> Identify students with cochlear implants</li> </ul>	<p>Week 9:</p> <ul style="list-style-type: none"> <li>• Pre-taped professor's lecture - "Technological devices"</li> <li>• 1-page reflection on reading and watching about technological supports in classroom</li> <li>• Read and post replies to 2 students</li> <li>• Watch the video (<a href="https://www.youtube.com/watch?v=Se5Wlrx2bU">https://www.youtube.com/watch?v=Se5Wlrx2bU</a>)</li> <li>• Practice the ASL Alphabet by playing the hangman online game (<a href="https://thewordsearch.com/hangman/">https://thewordsearch.com/hangman/</a>) <ul style="list-style-type: none"> <li>• Padlet</li> </ul> </li> </ul> <p>Week 10:</p> <ul style="list-style-type: none"> <li>• Pre-taped professor's lecture - "Cochlear implants"</li> <li>• 1-page reflection on reading and watching about cochlear implants</li> <li>• Read and post replies to 2 students</li> <li>• Watch the video (<a href="https://www.youtube.com/watch?v=Se5Wlrx2bU">https://www.youtube.com/watch?v=Se5Wlrx2bU</a>)</li> </ul>	<p>Week 9:</p> <ul style="list-style-type: none"> <li>• Formative Assessment: discussion and reflection - "Based on what you have learned so far, what other instruments do you think you can implement for deaf and hard of hearing students? Please explain why and how."</li> <li>• Formative Assessment: Lesson Plan #6</li> </ul> <p>Week 10:</p> <ul style="list-style-type: none"> <li>• Formative Assessment: discussion and reflection - "Based on this week's learning material, please explain what cochlear implant is and how this device helps deaf people to hear."</li> </ul>

		<a href="https://www.youtube.com/watch?v=fY4G9mgHKQs">com/watch?v=fY4G9mgHKQs</a> ) <ul style="list-style-type: none"> <li>• Padlet</li> <li>• Google Jamboard</li> </ul>	<ul style="list-style-type: none"> <li>• Summative Assessment: Quiz #3</li> </ul>
5. Evaluate planned teaching methods by recording and reflecting on effectiveness and accessibility.	<p>Week 11:</p> <ul style="list-style-type: none"> <li>• <b>Reading</b> Holcomb Chapters 16-17</li> <li>• <b>Content</b> Explain the universality of the deaf experience</li> </ul> <p>Week 12:</p> <ul style="list-style-type: none"> <li>• <b>Reading</b> Holcomb Chapters 18</li> <li>• <b>Content</b> Describe allyship in the deaf community</li> </ul>	<p>Week 11:</p> <ul style="list-style-type: none"> <li>• Pre-taped professor's lecture - "Universality of the deaf experience"</li> <li>• 1-page reflection on reading and watching deaf experience</li> <li>• Read and post replies to 2 students             <ul style="list-style-type: none"> <li>• Padlet Activity</li> <li>• Google Jamboard</li> <li>• Peer Review</li> </ul> </li> </ul> <p>Week 12:</p> <ul style="list-style-type: none"> <li>• Final Project Presentation</li> <li>• Watch and post replies to students             <ul style="list-style-type: none"> <li>• Watch "Understanding Deafness" (<a href="https://www.youtube.com/watch?v=I_EmsguJMic">https://www.youtube.com/watch?v=I_EmsguJMic</a>)</li> <li>• Padlet Activity</li> <li>• Google Jamboard</li> <li>• Peer Review</li> </ul> </li> </ul>	<p>Week 11:</p> <ul style="list-style-type: none"> <li>• Formative Assessment: discussion and reflection - "For discussion and reflection in Week 11, students will record one of the lesson plans and demonstrate how they will be teaching deaf and hard of hearing students. The video should be no more than 10 minutes brief explaining and demonstrating the lesson plan. Then, students will watch 2 other peers' videos, reply for their evaluation and provide feedback if they are accessible and inclusive."</li> </ul>

			<ul style="list-style-type: none"> <li>• Summative Assessment: Quiz #4</li> </ul> <p>Week 12:</p> <ul style="list-style-type: none"> <li>• Summative Assessment: Final Project</li> </ul>
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II. Enter each learning outcome according to Bloom's Taxonomy, and describe what you believe the sequence is most effective.

<b>Learning Outcomes</b> <i>(List them in the order you plan to address during the 12 weeks of curriculum.)</i>	<b>Rational for Sequence</b> <i>(Describe why you believe this sequence is the most effective.)</i>
1. Underline the difference between deaf and hard of hearing people and describe their community.	In this initial phase, students will acquire knowledge of deaf and hard of hearing students and their community and help to create accessible and inclusive classrooms.
2. Identify the characteristics of deaf and hard of hearing students and explore possible instrument options for students.	In this phase, students will gain an understanding of the characteristics of deaf and hard of hearing students and American Sign Language (ASL). Furthermore, students will start exploring possible instruments for 6 lesson plan assignments.
3. Practice the proper ways to play and demonstrate for students by bringing out the most visual ways possible.	In this stage, students will practice how to play instruments correctly and employ the most effective way to teach deaf and hard of hearing students.
4. Examine different approaches to teaching instruments and	This stage will guide students to plan more detailed methods of teaching musical instruments to deaf and hard of hearing students

implement supporting technologies.	and investigate technological supports that can be used in music classrooms.
5. Evaluate planned teaching methods by recording and reflecting on effectiveness and accessibility.	In this last phase of the course, students will have sufficient knowledge to implement a variety of methods of teaching musical instruments to deaf and hard of hearing students and make music classrooms accessible and inclusive.

### CURRICULUM PROJECT: DEVELOPMENT CHART

<b>Student: Angelina Kim</b>	<b>Course for which you are creating curriculum:</b> Online Teaching Deaf and Hard of Hearing Students Musical Instruments in General Music Classroom
<i>Consider the 3 advance organizer methods below. You must create an advance organizer for <b>each</b> method below to use as a pre-instructional strategy (to prepare the student to link what they <b>do</b> know to what they <b>do not</b> know).</i>	
<b>Expository</b> <i>(You are verbally describing the new content you are about to cover; enter below what you will say)</i>	
Hello class, welcome to Week 5. We have been covering lessons about deaf communities and students. In this week's reading assignment, you will read about disabled composers and musicians in Western Art Music. Today, we will explore four famous composers who suffered from hard of hearing and then later became completely deaf. They are Ludwig van Beethoven, Bedrich Smetana, Gabriel Faure, and Ralph Vaughan Williams. We all can feel how frustrating it must have been for these composers when they realized they could not hear anything. As we all know, hearing function is essential for being a musician. However, even after they became deaf, they did not stop composing music. Beethoven's Symphony No. 9, Smetana's <i>The Moldau</i> , Faure's Piano Trio, and Williams' Symphony No. 9 were written after	

all these amazing composers became deaf. This week, we will investigate these four composers and their musical journey throughout their lives.

**Narrative** (*You are presenting the new information in a story format; enter below what your “Story” will be.*)

Imagine yourself being at the peak of your career as director of the Prague Provisional Theatre. You are 50 years old and have worked hard for this position. You enjoy your work and are driven to achieve the next goal. Then suddenly you cannot hear in your left ear. You go to see a doctor and a specialist but there is nothing they can do. And one month later, your right-side ear has lost hearing, too. Within a month, you became completely deaf. You think about the profession that you work hard for, and ask yourself, “What is going to happen?” You have no choice but to resign because you cannot hear. Your world is crumbling down as you lose your hearing. Then, you think about the Moldau River you love that goes through woods and fields. You long to hear the river and make music about it. But is it possible to make music without hearing anything? My students, this is a story of Bedrich Smetana.

**Graphical Organizers** (*You are presenting an original visual pictograph, chart, or concept pattern.*)

*Describe the visual below and then copy and paste your original graphic.*



## Composers with Hearing Problems



**Ludwig Van  
Beethoven**



**Bedrich  
Smetana**



**Gabriel  
Faure**



**Ralph  
Vaughan  
Williams**

### Gagne's Nine Events of Instruction

Instruction Event	Describe how each instructional event will be addressed in your instructional unit. Cite a reference from your text as to why this approach will be effective.
1. Gain attention	<p>As the lecture starts, I will play Beethoven's <i>Symphony No. 9 in D minor, Op. 125, IV. Finale: Ode to Joy</i> as background music, then ask a question, "Did you know that this Symphony was composed after Beethoven was completely deaf?"</p> <p>According to Regelski's priming stage, it is important to invite students to learn the story behind this music and composer.<sup>6</sup></p>
2. Inform learners of objectives	<p>I will lay out Week 5's objectives and let students know the topics being discussed in this week's lesson. Students will be assigned reading materials about disabled composers and musicians in Western music, continue practicing the American Sign Language (ASL) alphabet, review previous information, and introduce new instruments for their future lesson plans. This method is supported</p>

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<sup>6</sup> Thomas A. Regelski, *Teaching General Music in Grades 4-8: A Musicianship Approach* (New York: Oxford University Press, 2004), 55-56.

	by Reinforcement Theory as students' learning behavior gets reinforced by revising previous activities and going forward with new information. <sup>7</sup>
3. Stimulate recall of prior learning	I will invite students to revisit the Padlet activity they have accumulated so far regarding deaf and hard of hearing students' community, making music classroom accessible and inclusive, their experiences on learning the ASL alphabet and playing percussion instruments. This stage will help students be ready for the transfer of learning. By recalling previous information, students will have a vertical transfer in a spiral curriculum. <sup>8</sup>
4. Present the content	I will begin with all the difficulties these four composers had to face with deafness. They were very determined and talented musicians who would not give up on their journey of being musicians. But I will remind students that the situation is a little different than our students because these musicians were not born deaf but became deaf in their later lives. I will organize presentations about four composers' early

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<sup>7</sup> Todd Zakrajsek and Linda B. Nilson. *Teaching at Its Best: A Research-Based Resource for College Instructors*. 5th ed. (Hoboken, NJ: Jossey-Bass, a Wiley Imprint, 2023), 115.

<sup>8</sup> Regelski, *Teaching General Music in Grades 4-8*, 62.

	<p>achievements, how they started having hearing loss, and music composition after their hearing loss. These musicians are Ludwig van Beethoven, Bedrich Smetana, Gabriel Faure, and Vaughan Williams. After each list, I will play the music pieces to make this content more interesting and connecting.<sup>9</sup></p>
5. Guide learning	<p>In my pre-recorded lecture, I will review what students have learned on different percussion instruments. First, I will model how to play Boomwhackers, and encourage students to practice. Students will continue to practice different percussion instruments and ASL alphabets. This process will help them to come back to the same theme they have learned previously for general transfer throughout lessons.<sup>10</sup></p>
6. Elicit performance (practice)	<p>I will provide websites where students can play an online hangman game. Students can practice ASL alphabets to spell words. Also, students will continue to practice instruments that they started learning and encourage them to explore more</p>

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<sup>9</sup> Zakrajsek and Nilson. *Teaching at Its Best*, 177.

<sup>10</sup> Regelski, *Teaching General Music in Grades 4-8*, 69.

	instrumental options on their own. According to Nilson and Zakrajsek, after 10-15 minutes of a lecture on new information, students need to be engaged in some activities to contain the new information. <sup>11</sup>
7. Provide feedback	After each lesson plan, I will provide formative feedback to students that can guide them to revise for their final project. Nilson and Zakrajsek suggest formative feedback can help the instructor and students at the same time as the instructor can become a facilitator rather than a judge. Students will be able to reflect on my feedback to improve on their final project. <sup>12</sup>
8. Assess performance	Students will be assessed on their performance on a formative assessment by posting discussion and reflection on this week's reading and videos. I will create and devise organized elements to new knowledge, and students will be able to discuss or examine by debate and evaluate the learning material they learned. <sup>13</sup>

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<sup>11</sup> Zakrajsek and Nilson. *Teaching at Its Best*, 181.

<sup>12</sup> Ibid., 286.

<sup>13</sup> Ibid., 301.

<p>9. Enhance retention and transfer</p>	<p>In this last stage, students will have the chance to revisit the information presented in week 5.</p> <p>Students will be able to recall famous deaf composers, their work on practicing ASL alphabets, and instrument options. I will end the week's lesson with the upcoming week's topic which will be identifying deaf artists, composers, and musicians in popular music genres. This week's lesson will be the readiness staging for the next week that students need to acquire the knowledge and skills for upcoming learning objectives.<sup>14</sup></p>
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<sup>14</sup> Regelski, *Teaching General Music in Grades 4-8*, 61.

## 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: <b>Angelina Kim</b>	<b>Course for which you are creating curriculum:</b> Online Teaching Deaf and Hard of Hearing Students Musical Instruments in General Music Classroom
<b>Physical Item</b>	<b>Rationale for Use</b> <b>Cite a reference from your text for each item indicating its effectiveness</b>
Textbooks	Textbooks are essential as they contain information that students need to acquire, and also teach students how to study independently. Students can read before each lesson and review afterward to retain the knowledge they have learned. Zakrajsek and Nilson explain that it is important for students to read, take notes, and discuss further, so the the new material is given in many different methods. <sup>15</sup>
Laptop or Desktop	This class will be asynchronous, so having a properly working laptop or desktop is crucial. In this distance

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<sup>15</sup> Zakrajsek and Nilson. *Teaching at Its Best*, 6.

	<p>learning environment, students have access to course materials through CANVAS and other online platforms. I will be uploading lesson content, supplementary videos, and then assessing students' assignments through CANVAS and online platforms. I value discussion threads assignments, because according to Regelski, discussions are an indirect way for students to pull into the priming stage that will engage students in lessons.<sup>16</sup></p>
Lecture notes	<p>Preparing lecture notes is also essential as I like to convey information in the most effective way. In this asynchronous classroom, unlike face-to-face classroom settings, I cannot check the interaction happening between students. So, making lecture notes and uploading them will be a powerful tool to engage students in this course. According to Zakrajsek and Nilson, making lectures interesting and offering a problem-solving approach for higher-order thinking will increase the chance for students to learn more and better.<sup>17</sup></p>
Educational software programs	<p>Software like PowerPoint, Google Slides, CANVAS, and Zoom will be used in this online asynchronous class. There are more software programs I can apply to make lecture materials more interesting and embedding. This software</p>

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<sup>16</sup> Regelski, *Teaching General Music in Grades 4-8*, 56.

<sup>17</sup> Zakrajsek and Nilson, *Teaching at Its Best*, 177.



	will aid me in creating lectures where students can engage, participate, and increase equity for students. <sup>18</sup>
Digital alphabet flashcards for the American Sign Language (ASL)	Throughout this course, students will learn and practice the American Sign Language (ASL) alphabet and hand motions for some basic words. I will provide digital flashcards for students so they can use this resource to revisit and practice as many times as they want. Students can pace themselves and flashcards will aid them to reinforce the ASL letters and words. Regelski explains that students need repeated references in order to reprime the lesson which will maintain the focus throughout the course. <sup>19</sup>
Percussion Instruments	Examples of percussion instruments will be used to show possible instrument options for students' six lesson plans. By modeling myself on how to play these instruments, students will gain a better understanding of each instrument. Furthermore, students will be encouraged to explore more instruments for their final project. By showing how to play these instruments correctly, students will be engaged in Action Learning where I will model so students will develop meanings, values, and purpose. <sup>20</sup>

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<sup>18</sup> Ibid., 48.

<sup>19</sup> Regelski, *Teaching General Music in Grades 4-8*, 59.

<sup>20</sup> Ibid., 16.



**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	<b>Rationale for Task</b> <b>Cite a reference from your text for each task indicating its effectiveness</b>
Prepare PowerPoint and visuals for lectures	<p>Posting learning materials prior to each lesson will assist students to listen closely and reinforce ideas.<sup>21</sup> This also provides an opportunity for students to study afterward and strengthen the knowledge they have learned. Visual aids help learning more exciting and grasp students' attention. I will gather more visuals to supply students for their understanding.</p>
Write discussion thread prompts	<p>I will be providing prompts for ten discussion threads according to each week's content. Zakrajsek and Nilson say well-managed discussion sessions can impact students on examining and exploring different ideas, active listening, critical thinking, and problem-solving skills.<sup>22</sup></p> <p>Discussion posts are where students can show their understanding of learning and collaborate with other students by replying back to them.</p>

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<sup>21</sup> Zakrajsek and Nilson, *Teaching at Its Best*, 178.

<sup>22</sup> Ibid., 189.

<p>Check URL links for correct information</p>	<p>Along with pre-recorded lectures, I will be posting supplementary videos for students that will help to comprehend the concept, such as visuals and examples. By integrating these learning aids, students will be facilitating their learning and can relate to their past, present, or future experiences.<sup>23</sup> These methods will provide students with multiple ways to learn the concept, so double checking these links will be important.</p>
<p>Prepare Rubrics for each assignment</p>	<p>I will be preparing Rubrics for each assignment where students can reflect on their assignments beforehand. Rubrics should be guidelines to mirror this course's outcome and tasks should be according to its purpose.<sup>24</sup> By providing Rubrics, students will understand the expectations of assignments, so there should be no surprises.</p>
<p>Record lessons and make any corrections</p>	<p>I will be recording my lectures and reviewing them before posting them in CANVAS. I will be looking to see if my approach will help students achieve the learning outcome of this course and make any changes that are necessary before the class starts. Zakrajsek and Nilson suggest that including too much material and delivering it too fast will not be effective lectures and would not help students to</p>

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<sup>23</sup> Zakrajsek and Nilson, *Teaching at Its Best*, 179.

<sup>24</sup> Ibid., 32.

	reach their learning outcomes. <sup>25</sup> I will make sure that these lectures are accurate and suitable for students.
Upload content for 12-week lessons	I will upload all the 12-week lesson contents accessible to students before the course starts. It will encourage students to preview, review, and practice information to reinforce their knowledge in learning. <sup>26</sup> Most importantly, I will check to see if every content is available and reliable.

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<sup>25</sup> Ibid., 178.

<sup>26</sup> Zakrajsek and Nilson, *Teaching at Its Best*, 6.

**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
Lesson Plans	<p>Students will be completing 6 lesson plans on different instruments of their choice. I will examine if they are practical and plausible to apply in a real-life classroom. Students will show their understanding and try to accommodate each instrument and lesson plan to teach deaf and hard of hearing students. In this stage, students can get feedback from me to improve their lesson plans before turning in their final project, and they will see where they can improve and advance in communication skills.<sup>27</sup></p>

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<sup>27</sup> Zakrajsek and Nilson, *Teaching at Its Best*, 286.

## CURRICULUM PROJECT: EVALUATION CHART

### Your Evaluation Plan

Student:	Course for which you are creating curriculum:	
Learning Outcomes	Your Formative Assessment Plan	<b>Rationale for Formative Assessment Type</b> <i>(Describe why you believe this assessment is the most effective and cite a reference from your text for support)</i>
1. Define Deaf and Hard of Hearing people and their community.	Discussion and reflection on the reading from Week 1. The prompt would be “Please introduce yourself to the class. What is your major and main instrument? Have you met any deaf or hard of hearing people before? Please explain your misconceptions about deaf and hard of hearing people and students. Your post is due by Thursday 11:59 p.m. (ET) and	I want to introduce students to the deaf and hard of hearing community and invite them to explore the options for their instrument choices. Students will be also discussing any biases they had before. This will give students a purpose for the week’s reading and write the prompt that will motivate them for more reading. <sup>28</sup> This assessment falls

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<sup>28</sup> Zakrajsek and Nilson, *Teaching at Its Best*, 264.

	replay back to at least 2 other students by Sunday 11:59 p.m. (ET).”	to level one of Bloom’s Taxonomy tier of knowledge.
2. Identify the characteristics of Deaf and Hard of Hearing students, and possible instrument options suitable for students.	Discussion and reflection on the reading from Week 3. The prompt would be “After your reading this week, provide 3 things you can do to make your classroom accessible and inclusive for deaf and hard of hearing students.” Students will be replying to at least 2 students so they will be exchanging and learning other options for their classroom.	After this week’s reading, students would realize how they can accommodate and make their classroom more accessible and inclusive for deaf and hard-of-hearing students. I will also demonstrate an accessible and inclusive classroom environment by using warm and inclusive language in my lectures and assignment instructions. <sup>29</sup> This stage aligns with the comprehension tier in Bloom’s Taxonomy.
3. Practice the correct ways to play each instrument to bring out the most visual ways possible.	By week 6, students will be turning in their third lesson plan assignment. Students should have gotten feedback from their previous 2 lesson plans, so they	I will have guidelines and suggestions as to how to search for each lesson plan. Students will have a clearer structural picture as to how to choose

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<sup>29</sup> Zakrajsek and Nilson, *Teaching at Its Best*, 102.



	will understand what they need to include in their assignment. I will also provide Rubrics to guide students on how they should lay out the lesson plan.	instruments and implement them in the classroom for deaf and hard of hearing students. I will be the one to guide students through this research process for students to successfully complete the final project. <sup>30</sup> This is the application stage from Bloom's Taxonomy.
4. Examine different methods of teaching musical instruments and supporting technologies.	Discussion and reflection will be based on reading and watching videos from Week 9. I will provide the prompt, "Based on what you have learned so far, what other instruments do you think you can implement for deaf and hard of hearing students? Please explain why and how." Students would be able to recommend and give feedback to other students about what other instrument options they can explore.	The prompt provided for Week 9 will extend students' previous knowledge and experience in their instruments and will be able to share the information with peers in the discussion thread. Students will be able to synthesize what they have learned in this class and propose other instrumental options based on their expertise. Discussion prompt questions that only set up rephrasing and recall do not carry out the purpose of discussion, but

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<sup>30</sup> Zakrajsek and Nilson, *Teaching at Its Best*, 156.

		<p>questions that evoke thought and creativity will kindle students' ability to inspect their knowledge.<sup>31</sup> This tier is an analysis step in Bloom's Taxonomy.</p>
<p>5. Evaluate teaching methods by recording and reflecting on effectiveness and clear accessibility.</p>	<p>For discussion and reflection in Week 11, students will record one of the lesson plans and demonstrate how they will be teaching deaf and hard of hearing students. The video should be no more than 10 minutes briefly explaining and demonstrating the lesson plan. Then, students will watch 2 other peers' videos, apply them to their evaluation, and provide feedback for accessibility and inclusiveness.</p>	<p>Students will read their feedback from peers and prepare upcoming final lesson plans accordingly. Students will also learn from other students' videos and apply the ideas from others, too. Student-peer feedback is one of the major teaching methods recommended by Zakrajsek and Nilson as it urges students to reflect on their work and others.<sup>32</sup> This stage represents the evaluation step in Bloom's Taxonomy.</p>

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<sup>31</sup> Zakrajsek and Nilson, *Teaching at Its Best*, 197.

<sup>32</sup> Ibid., 164.



### Evaluation and Reflection

Consider all of the charts and stages of development in order to create your syllabus. List at least 6 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
Each week's assignments are based mostly on readings. It is crucial to promote effective reading skills to students so they can review and learn from reading materials.	According to Zakrajsek and Nilson, there is a proven reading method called the 3R strategy for an effective reading process. These 3R's are to read, recite and review. Students can read text, then recite loudly or write down what they can remember, and then reread the section again which will help students remember what they have read. <sup>33</sup> Since students' early weeks of learning depend on the reading, I need to provide reading materials and guide students on how to retain the knowledge they have read.
All lectures will be pre-recorded and uploaded to CANVAS before the course starts. Lectures are key elements and having good lecture notes is essential.	Lecture notes should be concise and easy to read, according to Zakrajsek and Nilson. Writing down sentences is not effective but in headings or laying out with visual aids and graphics that can act as a map. <sup>34</sup> I will make my lecture notes in outline form and color

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<sup>33</sup> Zakrajsek and Nilson, *Teaching at Its Best*, 263.

<sup>34</sup> Ibid., 180.

	code with highlighters so I will not be lost while recording myself lecturing.
Many students might not have experienced deaf and hard of hearing students. The topic of this course could be challenging for some students.	Since students might not be exposed to deaf and hard of hearing communities, they could find this course taxing on their parts. I will provide good notetaking methods for students so as they read and study the course material, they will be engaged in reading and learning. <sup>35</sup> I will also try to collect students' feedback through discussion threads and emails to reflect on my teaching.
Try not to overwhelm students with too much reading but provide some other activities to engage and teach students.	Students will struggle to perceive lessons when the learning materials depend only on reading.  Furthermore, some students are not equipped with good reading comprehension skills. So, it is vital to provide students with guided reading and summarizing the learning materials in my lectures. One of the methods Zakrajsek and Nilson suggest is to prepare visuals to complement reading to direct students to the targeted purpose. <sup>36</sup>
This is a 12-week long course, and I should not consume students with too	I do not want to exhaust students with too many reading and writing assignments. Students have limited intake abilities and overwhelming them with too much

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<sup>35</sup> Zakrajsek and Nilson, *Teaching at Its Best*, 93.

<sup>36</sup> Ibid., 274.

<p>many assignments. I will promote a healthier way for students to learn.</p>	<p>work will not improve their learning ability. Moreover, I will not just provide one way of delivering the content but a combination of sources in an assignment like reading, web resources, and videos.<sup>37</sup></p>
<p>Since this is an asynchronous class, I will not be able to see students face-to-face. This may cause a problem in communicating with students regularly.</p>	<p>This course is offered online only. It gives an advantage to students to work accordingly to their schedule, but I will be missing live student interactions. So, I will provide virtual office hours where students can join via Zoom with any questions and provide help. I will also inform students to communicate through email and will respond back within a day or two. In the syllabus, I will post classroom expectations, and ask students to provide feedback anytime during the course.<sup>38</sup></p>

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<sup>37</sup> Zakrajsek and Nilson, *Teaching at Its Best*, 156.

<sup>38</sup> Ibid., 120.

## ***FORMATIVE ASSESSMENT***

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MUSC \_\_\_\_\_

**Student:** \_\_\_\_\_

### **Lesson Plan Template**

Grade: \_\_\_\_\_

Subject Area: Music

Time Duration: \_\_\_\_\_

The Content:

1. Content Standard(s):

2. Objective(s):

Students will be able to:

1.

3. Materials:

-

Teaching the Content:

4. Anticipatory Set/Motivation: (\_\_\_ minutes)

- 

5. Instruction & Checking for Understanding:

Instruction: (\_\_\_ minutes)

- 

Checking for Understanding: (\_\_\_ minutes)

- 

Using the Content:

6. Guided Practice: (\_\_\_ minutes)

- 

7. Independent Practice: (\_\_\_ minutes)

- 

Summing Up the Learning:



8. Closure: (\_\_\_ minutes)

- 

Measuring Learning:

9. Assessment:

-

## ***SUMMATIVE ASSESSMENT***

MUSC \_\_\_\_\_

Student: \_\_\_\_\_

1. What letter is this? (4 points)



1. A

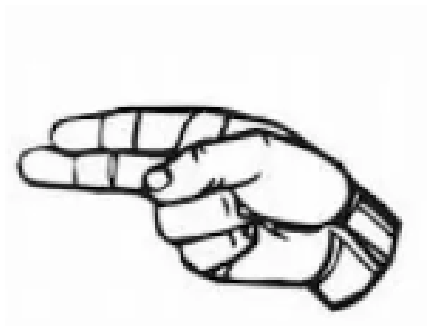
2. B

3. C

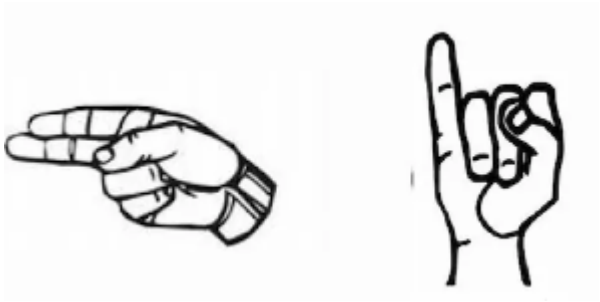


4. D

\*1. A

2. This letter is \_\_\_\_\_. (4 points)



\* H

<p>3. Putting these two letters would spell _____. (4 points)</p> 	<p>*Hi</p>
<p>4. This is letter "J". (4 points)</p> 	<p>1. True 2. False</p> <p>*1. True</p>
<p>5. This letter is "Z". (4 points)</p> 	<p>1. True 2. False</p> <p>*1. True</p>

6. What letter is this? (4 points)



1. L

2. O

3. Y

4. R

\*R

7. Please name this letter. (4 points)



1. O

2. Q

3. S

4. T

\*3. S

8. What is this letter? (4 points)



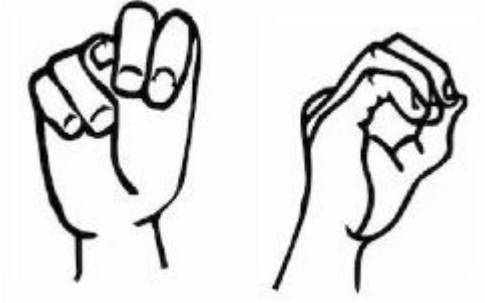

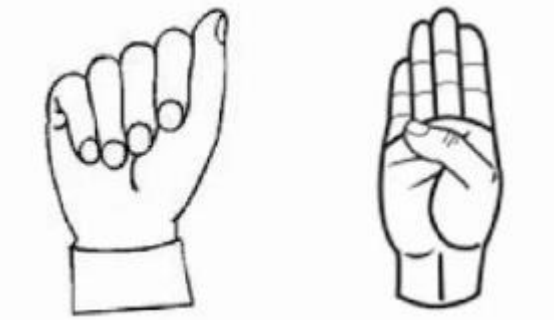
1. U




2. V

3. W

4. X

\*2. V

<p>9. These letters spell _____. (4 points)</p> 	<p>* No</p>
<p>10. Is this letter “L”? (4 points)</p> 	<p>1. True</p> <p>2. False</p> <p>*2. False: this is letter “Y”</p>
<p>11. If you put these two letters together, it would spell “Ab.” (4 points)</p> 	<p>1. True</p> <p>2. False</p> <p>*1. True</p>

<p>12. This is letter “M”. (4 points)</p> 	<p>1. True</p> <p>2. False</p> <p>*2. False: this is letter “N”</p>
<p>13. This is letter “V”. (4 points)</p> 	<p>1. True</p> <p>2. False</p> <p>*2. False: this letter is “K”</p>
<p>14. This letter is “U”. (4 points)</p> 	<p>1. True</p> <p>2. False</p> <p>*1. True</p>

15. What letter is this? (4 points)



1. W

2. X

3. Y

4. Z

\*2. X

16. This is to say \_\_\_\_\_. (4 points)



\* Hello




17. This is another way to say “Hello”. (4 points)



1. True

2. False

\*2. False: this is to say “Goodbye”

<p>18. What does this mean? (4 points)</p> 	<p>1. Please</p> <p>2. Help</p> <p>3. Like</p> <p>4. No</p> <p>*1. Please</p>
<p>19. This is to say “Sorry”. (4 points)</p> 	<p>1. True</p> <p>2. False</p> <p>*1. True</p>
<p>20. This means “You are welcome”. (4 points)</p> 	<p>1. True</p> <p>2. False</p> <p>*2. False: it means “Thank you”</p>



21. This means “Yes”. (4 points)



1. True

2. False

\*2. False: this means “No”

22. This means “Yes.” (4 points)

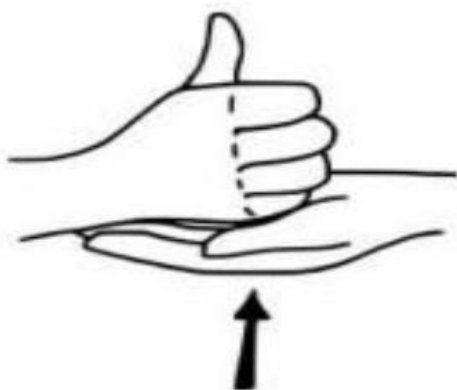


1. True

2. False

\*1. True

23. What does this mean? (4 points)





1. Help

2. Need

3. Eat

4. Work

1. Help

<p>24. Can you identify this word? (4 points)</p> 	<p>1. What?</p> <p>2. Need to go</p> <p>3. Morning</p> <p>4. Bathroom</p> <p><b>*4. Bathroom</b></p>
<p>25. What is this word? (4 points)</p> 	<p>1. When?</p> <p>2. Afternoon</p> <p>3. More</p> <p>4. Play</p> <p><b>*3. More</b></p>

