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MUSIC THERAPY AT AN INCLUSIVE EARLY LEARNING CENTER: A GRANT
PROPOSAL

THESIS

A thesis submitted in partial fulfillment of the
requirements for the degree of Master of Music in the
College of Fine Arts
at the University of Kentucky

By
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Lexington, Kentucky
Director: Dr. Alaine Reschke-Hernández, Assistant Professor of Music Therapy
Lexington, Kentucky
2023

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ABSTRACT OF THESIS

MUSIC THERAPY AT AN INCLUSIVE EARLY LEARNING CENTER: A GRANT PROPOSAL

Music in early childhood can enhance the development of communication, language, cognitive, and social emotional skills. Music therapy administered by a board-certified music therapist can be tailored to fit the specific developmental needs of children with and without disabilities. The purpose of this comprehensive clinical project was to develop a music therapy program for the Early Learning Center at the Lexington Hearing and Speech Center and a grant proposal to fund this program. First, I piloted a mini program through my Graduate Clinical Placement in Music Therapy (MUS 633) and supervisory experiences through my teaching assistantship. I then developed a program proposal that originated from an assignment in MUS 630: Medical Music Therapy. I tailored that program based on iterative feedback from various sources and based on the needs of the center identified by communication with the Director of the Early Learning Center. The program is grounded in the Affirmative Model of Disability, and I incorporated information gleaned from the Therapeutic Function of Music process to develop the music therapy components. Once I established the refined program proposal, I searched for an appropriate funding source for nonprofit organizations. After I identified an appropriate funding source (Toyota Motor Manufacturing, Kentucky, Inc.), I completed the grant application and received and reflected on feedback from various professional sources and my thesis chair. The completed clinical project is a detailed process on how I developed a music therapy program and grant proposal for an inclusive early learning center and a reflection on what I learned and the barriers I faced while completing this project. Music therapists may use this project as a model for program development and funding acquisition.

KEYWORDS: *early childhood music therapy, inclusive early learning center, preschool music, child development, grant proposal*

Laura Elliott Buckner

(Name of Student)

12/15/2023

Date

MUSIC THERAPY AT AN INCLUSIVE EARLY LEARNING CENTER: A GRANT
PROPOSAL

By

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Date

DEDICATION

To my grandfather and late grandmother, Fred and Lorene Trentham. They have supported and loved me my entire life and have been the cornerstone of my family.

"I'm made up of the memories of my parents and my grandparents, all of my ancestors. They're in the way I look, in the colour of my hair. And I'm made up of everyone I've ever met who's changed the way I think." — Terry Pratchett

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To my thesis committee chair, Dr. Alaine Reschke-Hernández, you have supported me every step of the way, with each pitfall and unexpected turn. You once described writing a thesis like a rollercoaster; there are highs and lows and twists and turns in between. You rode this rollercoaster with me until the very end. You challenged me when I did not challenge myself, and you encouraged me to rest when I was pushing myself too hard. You have supported me and showed up for me the entire time I have been a graduate student at the University of Kentucky. To my committee members, Drs. Olivia Swedberg Yinger and Natalie Pope, thank you for your time and expertise relating to the topics included in this work. I appreciate your guidance and how you have helped me become not only a better writer, but a better professional as well. Additionally, thank you, Dr. Martina Vasil. The skills I gained in your class, MUS 600: Introduction to Research, were essential. Without your teaching and feedback on my assignments, I would not have been able to write and complete a project of this caliber. Many thanks also go to the staff at the Robert E. Hemenway Writing Center at the University of Kentucky. You gave me very specific and helpful feedback which challenged me to no end, but I am a better writer and professional for it.

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my pursuit of education and helping others. You taught me how to learn. Of the numerous adages you have said throughout my 26 years on this planet, one has become my guiding principle: “Be excellent one day at a time.” The definition of “excellence” may vary based on the circumstance, but I work to embody this principle in all facets of my life.

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CHAPTER 1. INTRODUCTION

This thesis is a clinical project and consists of a grant proposal to Toyota Motor Sales, Inc. U.S.A., specifically Toyota Motor Manufacturing, Kentucky, Inc. The grant proposal is for a comprehensive music therapy program at the Early Learning Center (ELC) at the Lexington Hearing and Speech Center in Lexington, Kentucky. The idea for this clinical project was inspired by my experiences at the ELC during my advanced clinical placement and my desire to work with children as a music therapist. The chapters in this clinical project are as follows: 1. Introduction, 2. Literature Review, 3. Methods, 4. Grant Proposal, and 5. Reflection. In this chapter, I have included a personal statement to address how my privilege and marginalization affect my practice; I describe a theoretical framework I have adopted for this project and explain the purpose behind this clinical project.

1.1 Personal Statement

My primary aspirational vision as a music therapist is “Accessible and equitable music therapy for a greater quality of life.” My education and research have been tailored to this vision so that I may provide the best services possible to my communities. In order to do so, it is important to acknowledge my privilege and marginalization in life that may affect my internal and external biases.

I am a white, transgender, genderqueer lesbian. I grew up in a conservative two-parent household in Appalachia. During my upbringing, my family fluctuated between lower-middle socioeconomic status and upper-middle socioeconomic status. This gives me a unique perspective in that I know what it is like to experience both economic

hardship and economic success. As an adult on a single income, I work as an independent music therapist, subcontracting with two music therapy businesses, and I have a handful of various side jobs so that I can make ends meet.¹ In addition to having a single income, I was a full-time graduate student from August 2020 to May 2023. In order to attend school, I was not able to work as much, and I do not dwell in a two-income household. This made going to school while trying to meet my financial needs an immense struggle. My experience with economic hardship has increased the empathy I have for my clients who are experiencing similar hardship.

Additionally, as a queer person, I experience both marginalization and community daily, both from strangers and my own relatives, and this affects how I practice as a music therapist. I implement queer-affirming and anti-racist views into my practice to best serve those in my communities. I do not want any of my clients to experience marginalization in the same way I have. I am also disabled, which affects how I view the world and how I practice as a music therapist.

The language surrounding disability is constantly changing. Throughout this clinical project, I will use identity-first language, which is based on a person's disability being integrated with and part of their identity. This definition is based on current practice of disabled self-advocates and disability literature.² While I recognize that

¹ According to Beauchamp and colleagues (2022), "Even though nearly 30% of US households are made up of solo dwellers... a woman living alone would need to earn 65% of a two-person's household income to reach the same standard of living as a hetero-married couple" (para. 1).

² For more information about identity-first language, please visit <https://autisticadvocacy.org/about-asan/identity-first-language/>

certain disabilities cause impairments, I am disabled by a neurotypical and non-disabled society. This lived experience aligns with the theoretical framework I have adopted for this project: the Affirmative Model of Disability (described in a later section). I am autistic and Hard-of-Hearing and part of the Deaf community.³ I find community within both identities, and they are central to how I view and interact with the world around me. My experiences in the world as a queer, autistic, and Hard-of-Hearing person heavily influenced why I chose to work with children and disabled people.

Young children are very open-minded and accepting by nature. They have less experience than older children, teens, and adults, which leads them to be open to learning new concepts (Lucas et al., 2014). It is not until they are exposed to bias, whether that be overtly or through observations in their environment, that they develop biases in favor of or against others (Skinner et al., 2020). This openness is one of the reasons why I enjoy working with children. As a queer, disabled person, I have had several neurotypical⁴ adults pass judgment on me and make assumptions without getting to know me or ask questions. In my experience, young children are less likely to do this and more likely to ask questions instead. These questions tend to come from a place of curiosity, not malice (Fusaro & Smith, 2018). Being my most authentic self in the workplace exposes my clients to different cultures and identities that they may not otherwise have the chance to learn about. Although my experiences as a disabled person, specifically autistic and

³ The capitalization of “Hard-of-Hearing” and “Deaf” here is intentional. For more information about Deaf culture and community, please visit <https://bit.ly/44qbRLO> (National Association of the Deaf)

⁴ For more information about the neurodiversity paradigm, please visit <https://www.disabled-world.com/disability/awareness/neurodiversity/>

Hard-of-Hearing, is different from others' lived experiences, I can relate to my clients in a way that other professionals may not be able to. Because the Early Learning Center at the Lexington Hearing and Speech Center specializes in teaching children communication skills, several of the children that attend the center are autistic, deaf/hard-of-hearing,⁵ or have a communication disability. These shared life experiences have been very helpful in connecting with the children because they are able to communicate their needs with me. Someone who does not have these identities would not understand their communication needs from lived experience. I understand how they communicate, and we work together to meet their needs. This clinical project is a direct result of my experience with the children at the ELC. A comprehensive music therapy program at the ELC at the Lexington Hearing and Speech Center would support the children's developmental needs. The following section gives a background on the center and their history with music therapy.

1.2 Background

The Lexington Hearing and Speech Center, established in 1960, has an inclusive Early Learning Center that supports the development of approximately 160 children, ages 6 weeks to 5 years, in 13 classrooms. This ELC caters to the diverse needs of both non-disabled and disabled children. Their mission is "for children to leave HSC [Hearing and Speech Center] with the language and independence to be active participants in their

⁵ "deaf" and "hard-of-hearing" are lowercase here because I am referring to the physical diagnosis, not the cultural identity.

community” (The Hearing & Speech Center, 2020, para. 4). The disabled children at the center mostly have disabilities that relate to speech and communication.

According to the Director of the ELC, a music therapist previously provided music therapy to the ELC at the Lexington Hearing and Speech Center through grant funding, which they no longer receive. In the 2022-2023 academic year, they received services from myself and the two practicum students that I supervised from the University of Kentucky at no cost to the center. As a board-certified music therapist, I began providing music therapy to the center during my graduate clinical placement, when I supervised two practicum students. As a graduate teaching assistant and practicum supervisor, I continued to provide music therapy services along with a practicum student for four classes at the Hearing and Speech Center once a week until May 5, 2023. Although the University of Kentucky Music Therapy Program may be able to provide intermittent music therapy practicum-based services in the future, a regular, ongoing, comprehensive music therapy program would support the developmental needs of all the children at the center. In the next section, I describe the theoretical framework I adopted to complete this clinical project and develop a program to fulfill the needs of the children at the Early Learning Center.

1.3 Theoretical Framework

The theoretical framework for this project was the Affirmative Model of Disability (Swain & French, 2000), and I utilized the Therapeutic Function of Music framework (Hanson-Abromeit, 2015) to inform the development of the music therapy program. The Affirmative Model of Disability was developed as an antithesis to the

personal tragedy model of disability (i.e., a tragedy to be cured; Harris, 2000) and in response to the Social Model of Disability (i.e., people are disabled by barriers in their society, not by physical barriers; Shakespeare, 2010; Swain & French, 2000). According to Shakespeare (2010), the Social Model of Disability began with the Union of Physically Impaired Against Segregation (UPIAS). UPIAS urged segregated places (i.e., places that were inaccessible to disabled people) to make changes so that disabled individuals could fully integrate in society and have autonomy over their own lives. UPIAS (1974) asserted that there is a distinct difference between disability and impairment. Disability is “social exclusion,” whereas impairment is “physical limitation” (Shakespeare, 2010, p. 267). Rickson (2014) also acknowledged that people may have physical or mental impairments, but disability is caused by environmental, attitudinal, and social obstacles established by society that limit integration and living to one’s highest potential.

The Affirmative Model of Disability, first written about by Swain and French (2000), builds on the Social Model and extends beyond consideration of societal barriers. The Affirmative Model asserts that while societal structure is indeed disabling to those with various impairments, even if all these various barriers were removed, impairments would still impact the disabled individual in some way (Cameron, 2010; McCormack & Collins, 2010; Rickson, 2014; Swain & French, 2000). However, these impairments do not always impact the individual negatively. Rickson (2014) indicated that people who use the Affirmative Model describe impairment as something that can be difficult and painful while also providing value. Those who apply the Affirmative Model also conceptualize disability as a socially marginalized identity, and that disabled people often

find community in this identity (Rickson, 2014). This quote from Rickson (2014) sums it up best: “The Affirmative Model is about validating the lives and experiences of people with impairments and enabling them to make sense of themselves as actors in their own cultural worlds” (para. 8).

The Affirmative Model of Disability is appropriate for this clinical project because it aligns with the mission of the ELC (“for children to leave HSC with the language and independence to be active participants in their community”), and the children and the teachers appear to adhere to this model implicitly (The Hearing & Speech Center, 2020, para. 4). In my observations, they celebrate the differences of the disabled children while also affirming that there are some challenges, thus validating all parts of their experiences. The Affirmative Model is how I live my own life as an autistic and Hard-of-Hearing person. While I am disabled by the barriers in the world around me, even if those barriers were gone, I would still have some difficulties meeting all my needs. This informs how I live my life and practice as a music therapist. Thus, the Affirmative Model of Disability not only aligns with the center but also my practice as a music therapist at the center.

1.3.1 Therapeutic Function of Music

While the Affirmative Model of Disability does provide a theoretical framework for designing a program for disabled children, it does not provide information or a model on the use of music in said program. The Therapeutic Function of Music framework is the why, what, and how music, and its specific musical elements, are used in a certain setting to achieve therapeutic goals (Hanson-Abromeit, 2015). I utilized this framework

to develop the music therapy component of this project, in conjunction with the Affirmative Model of Disability. The Therapeutic Function of Music framework begins with identifying a problem statement (i.e., clinical question or goal) which includes stating a rationale for music therapy. The next step after identifying a problem statement is defining the elements of music in context (rhythm, tempo, melody, pitch, dynamics, harmony, style, lyrics, form, and timbre).

After defining the elements of music, the theoretical framework for the clinical use of musical elements becomes very important. According to the Therapeutic Function of Music framework (Hanson-Abromeit, 2015), the theoretical framework is “why” each element of music theoretically supports the clinical goal(s) and is grounded in research about music and musical behavior. After identifying “why” each element is important to music therapy at the center, the next component of the framework is to identify “what” each element will do in context (i.e., a hypothesis). This is the purpose of each musical element. The purpose of each element is built on the problem statement and the theoretical framework.

After identifying the “why” and “what” of each element, the next step is to use logic to articulate “how” to use and implement each element of music to address the goal areas. This description of the musical element builds on the problem statement, theoretical framework, and the purpose of each musical element. The final step is to combine this information into a theory-based synthesis, which is essentially an evidence-based guide for creating and implementing music experiences. I learned this process, the Therapeutic Function of Music by Hanson-Abromeit (2015), from assignments in three

music therapy courses at the University of Kentucky: MUS 430G: Music Therapy Foundations and Principles I, MUS 431G: Music Therapy Foundations and Principles II, and MUS 633: Graduate Clinical Placement. I used this process specifically when I created the program proposal for the Early Learning Center (refer to Appendix A). An example of this process for one of the preschool classes I worked with in Fall 2022 can be found in Appendix E. The name of the class has been changed to protect the children's privacy.

1.4 Purpose

The purpose of this clinical project was to develop a comprehensive music therapy program for the Early Learning Center at the Lexington Hearing and Speech Center and a grant proposal to fund this program. In the next chapter, I review literature regarding the use of music and music therapy in early childhood, which informed the development of this program.

1.5 Glossary

I have included a list of terms that are related to this clinical project. These terms are important to know when creating a program proposal, particularly for the Early Learning Center at the Lexington Hearing and Speech Center, and when acquiring funds. **501I(3) number:** A 501I(3) number is a unique number used to identify a type of non-profit organization. Non-profit organizations that have this number “may be considered public charities, private foundations, or private operating foundations” and are often tax-exempt (Foundation Group, Inc., 1995-2023).

Cochlear Implant: A cochlear implant is an electronic device used to deliver sound signals to the auditory nerve via an external processor worn behind the ear and a surgically implanted receiver (Mayo Foundation for Medical Education and Research, 2022a).

Emotion Regulation (ER): ER describes how a person returns to an emotional homeostasis after changes in emotion. The emotion is an indicator “that equilibrium is disrupted” (Sena Moore & Hanson-Abromeit, 2015, p. 572).

Hearing Aid: A hearing aid is an electronic device worn in the ear to amplify sound. All hearing aids have a microphone, amplifier, speaker, and battery. Some hearing aids have more components than others. Sound enters the hearing aid through microphones. Then the amplifier converts the “sound into a digital code,” and then “the amplified signals are then converted back into sound waves and delivered to your ears through speakers, sometimes called receivers” (Mayo Foundation for Medical Education and Research, 2022b).

Identity-First Language: Saying the person’s disability first (i.e., autistic person, Deaf person, Hard-of-Hearing person). Identity-first language is often used as a sign of culture surrounding the disability and taking pride in disability as a core part of one’s identity (Ryf, 2023; Sibley, 2013).

Non-profit organization: “A nonprofit organization is a business that has been granted tax-exempt status by the Internal Revenue Service (IRS) because it furthers a social cause and provides a public benefit” (Kenton, 2023, para. 1).

Person-First Language: “puts the person before their disability or condition. The theory here is that someone is a person first and not defined by their disability” (Ryf, 2023, para. 4).

Request for Proposals: “document that describes a project's needs and asks for proposed solutions from qualified vendors” (Peters, 2011, para. 1).

Social Emotional Learning: First used in 1994, the term “social emotional learning” (SEL) refers to the ability to maintain positive social relationships; identify, label, and regulate emotions; set goals; make responsible choices; and show empathy towards others (Varádi, 2022).

CHAPTER 2. LITERATURE REVIEW

The literature surrounding early childhood development is expansive and dates back to the early 1900s (Manny, 1910; Piaget & Cartalis, 1928). Current literature about early childhood development includes topics ranging from cognitive skills and reading interventions to behavioral and emotional disorders to parental bonding and social skills (Kucirkova & Tolsum, 2023; Tesson et al., 2022; Thümmeler et al., 2022). A common tool that can be used to address all of these skills is music (Humpal, 2018).

Music serves many roles, from entertainment to enriching childhood development. According to Gordon's Music Learning Model (2012), at as early as two weeks old, an infant with typical hearing will stop moving when they hear a sound, regardless of what that sound is. By two months old, infants can focus their attention when being sung to. By the age of six months, infants can move their whole body to music (Gordon, 2012; Humpal, 2018; Schwartz, 2008). In addition to the bodily responses to music, the effects of music on various cognitive skills related to speech and reading have been studied by several researchers. Some of these findings will be summarized in this chapter, along with information about music and emotion regulation and music therapy and inclusive early childhood settings.

2.1 Music and Various Cognitive Skills

Researchers have concluded that music and improved cognition are highly correlated (Bergman Nutley et al., 2014; Flaugnacco et al., 2015). Bergman Nutley and colleagues (2014) conducted a longitudinal study and concluded that children who engaged in music activities, such as playing an instrument, had increased word

processing speed, working memory, and reasoning ability. While this finding does not provide information about causation, the statistically significant positive correlation indicates the need for future study of music's influence on word processing speed, working memory, and reasoning ability.

Several researchers have examined the influence of music training on communication skills. Zhau and Kuhl (2016) conducted a study with 9-month-old infants and found that the infants randomly assigned to the music intervention condition had improved event-related potentials (ERPs, "very small voltages generated in the brain structures in response to specific events or stimuli," Sur & Sinha, 2009, p. 70) and enhanced temporal processing of speech when compared to infants who did not complete the music intervention. Another randomized controlled study, conducted by Flaugnacco and colleagues (2015), tested the hypothesis "that music training should boost temporal processing at different time scales and this may have in turn a positive impact on phonological awareness and reading abilities in children with dyslexia" (p. 2). While these participants were older children (8-10 years), results of this study suggest that music training at an early age may impact reading and phonological skills later in childhood (Flaugnacco et al., 2015). Furthermore, Tierney and Kraus (2014) reported the following:

There is *overlap* between the neural networks that process timing in the context of both music and language. Entrainment to music demands more *precise* timing sensitivity than does language processing. Moreover, auditory-motor timing

integration captures the *emotion* of the trainee, is *repeatedly* practiced, and demands focused *attention* (p. 949; emphasis in original).

Taken together, the rhythmic nature of music seems to facilitate development and improvement of phonological skills and other reading skills. One can build on such findings to develop and implement music-based interventions in early childhood. An ongoing study that uses music interventions to continue this line of research (i.e., music's influence on ERPs) and learning disabilities such as dyslexia is DyslexiaBaby at the University of Helsinki, which will be described in detail in the next section.

2.1.1 Music, Language, and Communication Development

DyslexiaBaby is an ongoing study that is conducted by a research group at the University of Helsinki (2023). During this study, infants between birth and six months of age are pseudo-randomized into one of three groups: instrumental music-listening intervention, vocal music-listening intervention, and no music intervention (control group; Virtala & Partanen, 2018). Six months following the intervention, researchers test the infants' auditory ERPs (i.e., brain responses to sounds). When the infant is 30 months old, the ERPs are tested again along with a thorough language and cognitive development assessment (Virtala & Partanen, 2018).

In contrast to findings from other studies discussed previously (Flaugnacco et al., 2015; Tierney & Kraus, 2014; Zhau & Kuhl, 2016), initial results from DyslexiaBaby indicate that the music intervention does not significantly affect auditory ERPs or pre-language development. However, based on the parent report portion of the study, there appears to be a highly positive correlation between informal music and language

experiences at home (e.g., singing, reading books, listening to music) and pre-language development as well as musical play and auditory ERPs (Virtala & Partanen, 2018). These findings suggest that engaging in these activities regularly with their caregivers may facilitate infants' ability to process the sounds around them.

Putkinen and colleagues (2012) also supported this finding. They found that children with more informal music activities in the home were less distractible, had a "heightened sensitivity to temporal acoustic changes," and were better able to detect "more mature auditory change" (Putkinen et al., 2012, p. 654). Infants were also able to maintain eye-contact and orient to parents more while entraining to the steady beat of music and while being sung to (Lense et al., 2022).

Research has also supported the use of music in language development in children with cochlear implants and hearing aids. Welch and colleagues (2015) conducted a pilot study and found that after receiving specialized singing instruction in a school-based setting for 20 weeks, children with typical hearing and children who use cochlear implants or hearing aids displayed statistically significant improvements in pitch perception. Enhanced pitch perception facilitates pitch discrimination and identifying certain sounds, such as those needed to understand spoken language or interpret environmental sounds (Oxenham, 2008). Moreover, when children receive music services with "active, social engagement," children are more likely to benefit from improved preverbal language development (Virtala & Partanen, 2018, p. 93). In conjunction with evidence from other related literature, Welch and colleagues (2015), concluded that all

children “should have extended and rich musical experiences, both formally in school settings as well as informally in the home, pre-school and subsequently” (p. S70).

Collectively, this body of research indicates that during the early years of life, music plays a role in language and communication development, cognitive development, and motor coordination, and it seems important for young children to be regularly engaged in music. Music engagement also appears to facilitate physiological and emotion regulation as evidenced by the literature in the next section.

2.2 Music and Emotion Regulation

Music facilitates emotion regulation (ER), which describes how a person returns to an emotional homeostasis after changes in emotion. The emotion is an indicator “that equilibrium is disrupted” (Sena Moore & Hanson-Abromeit, 2015, p. 572). Moreover, ER typically develops in three stages: “(1) simple physiologic and reflexive responses, (2) caregiver-directed co-regulatory strategies or the use of simple attentional and motor strategies, and (3) active and intentional self-regulation of emotions” (Sena Moore & Hanson-Abromeit, 2015, p. 572). Children tend to develop awareness of both positive and negative ER strategies around 3- to 5-years-old (Cole et al., 2009). However, children begin developing these skills unknowingly during infancy, and the development and implementation of these skills is highly influenced by caregiver involvement (Cole et al., 2009; Sena Moore & Hanson-Abromeit, 2015).

Both children with emotionally distant caregivers and children with overly involved caregivers are less likely to be able to self-regulate their emotions. They have either not been exposed to healthy self-regulation, or they have not been given the

opportunity to practice self-regulation (Cole et al., 2009). Cole and colleagues (2009) reported “that optimal parenting involves both a warm acceptance of a child’s emotions and guidance in how to manage emotions” (p. 326). While the authors of the previous article discussed parenting, much of this information can be generalized to anyone involved in caregiving and nurturing children, and music is a great tool to help children develop ER skills (Schwartz, 2008; Sena Moore, 2013; Sena Moore & Hanson-Abromeit, 2015).

In a systematic review, Sena Moore (2013) found that music can activate certain parts of the brain that underlie physiological and ER (e.g., orbitofrontal cortex, prefrontal cortex) based on its emotional relevance (or the lack thereof) to the listener.

Physiologically, music can help regulate bodily responses, such as changing heart and respiration rates to the musical beat in times of distress, which may facilitate a sense of comfort (Edgar, 2019; Schwartz, 2008). Music also provides structured and predictable auditory stimulation that can be manipulated to increase tolerance for various sensory stimuli (Schwartz, 2008). Because music influences physiological responses, provides opportunities to do things together, and opportunities to self-direct, it offers direct opportunities to support ER development (Sena Moore & Hanson-Abromeit, 2015; 2018).

Sena Moore & Hanson-Abromeit (2018) conducted a mixed methods study to test the effectiveness and feasibility of the Musical Contour Regulation Facilitation intervention to promote ER development in preschoolers. This intervention allowed preschoolers the space to actively practice ER strategies through music experiences. The

authors concluded that the children who received the intervention demonstrated improved ER skills. Specifically, teachers noticed that the children expressed their emotions after participating in the intervention, and that those emotions were lower in arousal. Teachers also perceived less “emotional lability, emotion reactivity, and externalizing problems” (Sena Moore & Hanson-Abromeit, 2018, p. 432).

In 2022, Zhang and colleagues (2022) conducted a randomized controlled study that revealed group improvisational music therapy had a statistically significant impact on ER and depression. Although this study was conducted with college students, results showed that participants who engaged in active music making demonstrated improved ER and decreased depression. For children, Schwartz (2008) indicated that music helps them have confidence about their place in society, connecting them to their culture and community. Music is essential to community building and developing a sense of cultural identity. ER has also been positively correlated with greater well-being and higher socioeconomic status into adulthood and is an important skill throughout life because it impacts one’s ability to engage in social relationships (Côté et al., 2010; Zhang et al., 2022).

It seems that supporting ER with music in early childhood may have important effects that could carry into adulthood. One example regards the use of music to support behavioral self-regulation. In a quasi-randomized, longitudinal study, Lo and colleagues (2022) found that children with hearing impairments (like many of the children at the Hearing and Speech Center) demonstrated significantly more behavioral and emotional symptoms of poor psychosocial well-being and lower health-related quality of life than

children without hearing impairment. The researchers found that participating in 12-weeks of group music activities helped counteract some of these risks to psychosocial well-being. The children with sensorineural hearing loss, a type of hearing loss in which the inner ear is damaged (ASHA, 2023), demonstrated significantly reduced emotional (e.g., worry) and peer (e.g., friendships) problems as well as hyperactivity and conduct problems (e.g., fighting; as measured by the Strengths and Difficulties Questionnaire) after participating in group music activities. In other words, participating in a music group led to better psychosocial well-being, and the children with hearing loss ended up with similar scores as their peers by the conclusion of the music groups. While music training did not significantly influence health-related quality of life, these results suggest that group music activities may have clinically meaningful benefit to psychosocial well-being and behavioral self-regulation for this population that could carry into adulthood (Lo et al., 2022).

2.2.1 Music and Social Emotional Learning

Social emotional learning is a concept that is intimately related to ER. First used in 1994, the term “social emotional learning” (SEL) refers to the ability to maintain positive social relationships; identify, label, and regulate emotions; set goals; make responsible choices; and show empathy towards others (Varádi, 2022). According to the Collaborative for Academic, Social, and Emotional Learning (CASEL, 2023), there are five SEL competencies: *self-awareness*, *social awareness*, *responsible decision making*, *self-management*, and *relationship skills*. Self-awareness includes identifying and labeling emotions, experiencing a sense of self-efficacy, and acknowledging spiritual

beliefs. Social awareness is all about how someone gets along with the society around them. Diversity, empathy, and respect are all values of social awareness. Responsible decision-making includes identifying problems, problem solving, and personal responsibility. After identifying and labeling the emotion one is feeling, they can self-regulate and exhibit self-control, organizational skills, and stress management skills. Relationship skills are all about how someone maintains relationships with others specific to their role in the relationship. Similar to social awareness, relationship skills are more specific; social awareness is generalized to someone's place in society (CASEL, 2023).

Music engagement has the potential to facilitate all aspects of SEL (Edgar, 2019). According to Southwell (2016), expressive therapies (a term used to describe art, music, dance, drama, and poetry therapies collectively) reinforce the capacity for secure attachment and development of ER, self-efficacy, and relationship skills. Infants approximate the steady beat by clapping their hands (i.e., self-awareness and self-management). Preschoolers can take turns during music activities and demonstrate listening to their classmates by copying their movements (i.e., relationship skills, self-awareness, responsible decision-making). Students must be aware of their body and surroundings when engaging in movement activities, playing instruments, and singing so as not to hurt themselves or others physically or by singing/playing too loudly or aggressively (i.e., self-awareness and self-management). Students can also demonstrate self-management skills by regulating their emotions during musical cool down activities when feeling overwhelmed. Refer to Table 1 for an organized view of the SEL competencies, definitions, and music therapy examples.

Table 1

Social Emotional Learning (SEL) Competencies, Definitions, and Music Therapy

Examples

SEL Competency	Definition¹	Music Therapy Example²
Self-Awareness	<ul style="list-style-type: none">• Identifying and labeling emotions• Experiencing a sense of self-efficacy• Acknowledging spiritual beliefs	<ul style="list-style-type: none">• Infants approximate the steady beat of the music by clapping their hands.• Children decide whether they want to listen to fast or slow music (self-efficacy because children are proud of themselves for making a decision).
Self-Management	<ul style="list-style-type: none">• Exhibit self-regulation• Exhibit self-control• Exhibit organizational skills• Exhibit stress-management skills	<ul style="list-style-type: none">• Infants approximate the steady beat of the music by clapping their hands.• Children demonstrate self-regulation during cool-down music activities.
Responsible Decision-Making	<ul style="list-style-type: none">• Identifying problems• Problem-solving• Taking personal responsibility	<ul style="list-style-type: none">• Children decide whether they want to listen to fast or slow music.
Social Awareness	<ul style="list-style-type: none">• How someone gets along with the society around them	<ul style="list-style-type: none">• Children take turns choosing finger puppets during music interventions.
Relationship Skills	<ul style="list-style-type: none">• How someone maintains relationships with others <i>specific to their role in the relationship</i>	<ul style="list-style-type: none">• Children take turns choosing finger puppets during music interventions.

Note. 1. Collaborative for Academic, Social, and Emotional Learning (CASEL), 2023. 2.

Some examples include more than one SEL competency and will be repeated next to each competency they include. These examples come from my own experience as a music

therapist at the Early Learning Center and are informed by the Therapeutic Function of Music (Hanson-Abromeit, 2015). Each of these activities is facilitated by the music therapist who designs interventions with specific SEL competencies in mind.

Social and emotional skills are vital to expressing basic needs, communicating with others, and adjusting to change in childhood and throughout life. Children who are preschool age or younger are just in the beginning of their social and emotional learning. They often struggle with impulse control, self-regulation, and communication. Infants, toddlers, and preschool-aged children all engage in “attention-seeking” behaviors. These behaviors can be attributed to a child’s desire to seek positive connections with others (Southwell, 2016). Considering the goals of the Early Learning Center, the development of toddlers and preschoolers, and the role music can play in effectively supporting social and emotional development, a comprehensive and inclusive music therapy program should support SEL development (Bunt, 2016; Edgar, 2019; K. Smart, personal communication, February 2, 2023; Varádi, 2022).

In addition to providing general support to child development, music experiences can offer valuable developmental support to children with hearing impairments in inclusive settings. With regards to preschool-aged cochlear implant users, Gfeller and colleagues (2013) reported, “With suitable accommodations, and developmentally-appropriate objectives, most implanted children can enjoy and successfully participate in some types of musical activity” (p. 44). This allows for more seamless integration and inclusion with their hearing peers and the hearing society at large. While music

engagement in general is important to childhood development and inclusion, music therapists are specifically trained to leverage musical elements and design goal-oriented music experiences that can address the development of non-musical skills in therapeutic and inclusive settings, such as the Early Learning Center.

2.3 Music Therapy and Inclusive Early Childhood Settings

Music therapy is the use of music by a credentialed music therapist to address non-musical goals within a therapeutic relationship, including cognitive skills, social-emotional skills, language and communication skills, and fine/gross motor skills (American Music Therapy Association, 1998-2023). Music therapy in early childhood involves a music therapist creating and implementing music interventions and experiences to help children achieve developmental milestones (Humpal, 2018). Auditory skills begin developing in a fetus as young as 18 weeks' gestation, and musical detection skills are documented at as young as two months old, which means that music is an appropriate therapeutic medium for this age group (Schwartz, 2008; Standley & Walworth, 2010). Music therapists consider musical development when planning interventions so that the children can be the most successful.

Music therapists use their knowledge of how children cultivate musical skills to aid the development of other skills in the domain areas of cognition, language and communication, fine and gross motor skills, and socio-emotional skills (Humpal, 2018). Because of the nature of music and child development, Humpal (2018) concluded the following:

Developmentally appropriate music therapy acknowledges the young child's world is permeated by playful use of music that not only builds music awareness and skills, but is also a powerful tool for addressing non-music goals in an enjoyable, meaningful, and effective manner (p. 172).

For example, in a preschool music therapy session that includes children with hearing loss, a music therapist would purposefully design and implement music interventions with repetitive opportunities to practice phonemes, vocabulary words, and turn-taking to facilitate language and communication development (Gfeller et al., 2013; Register et al., 2012) and make accommodations based on knowledge of the characteristics of the specific type of hearing loss (Gfeller et al., 2013) – a central focus of the Early Learning Center (The Hearing & Speech Center, 2020).

The Early Learning Center supports the development of approximately 160 children annually, ages 6 weeks-Kindergarten in 13 classrooms. This Early Learning Center caters to the diverse needs of both non-disabled and disabled children. Their mission is “for children to leave HSC with the language and independence to be active participants in their community” (The Hearing & Speech Center, 2020, para. 4). As based on the literature provided in this chapter, a comprehensive music therapy program would enhance this inclusive environment by supporting the developmental needs of all the children in the preschool. The following chapter is a detailed description of the steps required to complete this clinical project. Some of those steps include the following: writing a prospectus, drafting a program proposal, identifying an appropriate funding source, completing a grant application, and drafting a clinical project.

CHAPTER 3. METHODS

The idea for this project was originally conceived during the Fall semester of 2022 in MUS 633: Graduate Clinical Placement in Music Therapy. I was offered the opportunity to complete my practicum hours at the Early Learning Center (ELC) at the Lexington Hearing and Speech Center in Lexington, KY. I thoroughly enjoyed working with the children during my practicum, and the teachers often expressed how much they enjoyed me coming to their classes. Some of the teachers from the classrooms that I did not work with approached me to ask why they didn't receive music therapy services. In addition to the developmental benefits articulated in Chapter 2, these experiences further demonstrated an interest in a comprehensive music therapy program at the ELC. This chapter documents how I wrote the program and grant proposals for the comprehensive music therapy program at the ELC and how I completed this clinical project.

3.1 The Prospectus

As stated, the idea for this clinical project was first formed during Fall 2022. In January 2023, I began formulating my prospectus. This process involved drafting, regular feedback from my committee chair, and revision. This prospectus included a brief literature review, theoretical framework, proposed methods and timeline of project milestones, and a list of potential pitfalls and possible solutions. The prospectus was approved June 12, 2023. While writing the prospectus, I worked on creating the ELC program proposal that would be used in the grant proposal.

3.2 The Program Proposal

The initial ELC program proposal draft was an assignment for MUS 630: Medical Music Therapy. Although the ELC is not a medical setting, music therapy is used to enhance the well-being of the children at the center. I received feedback on this initial draft proposal from my professor.

After refining and expanding the program proposal draft, I met with a local music therapy business owner who has experience creating grant-funded music therapy programs. I utilized their feedback to further refine the ELC program proposal. I then sent the program proposal and budget to the Director of the ELC on June 14, 2023. When I did not receive a response from the Director by August 10, 2023, I sent these documents to the Assistant Director of the ELC but did not receive a response from them either.

The final ELC program proposal (refer to Appendix A) includes a statement of need, a brief literature review, an approach (how I would execute the program), a budget, and a budget justification. In the statement of need, I provide background about the ELC and why the children at the ELC benefit from music therapy. I then support this need through the literature review. The approach includes a structure of what occurs during a typical session and a list of classes and session durations for each class. Briefly, a typical session uses the following structure: musical opening/welcome, movement intervention, primary music intervention(s), cool down musical intervention, and musical goodbye/closing. All classes meet twice per week for a duration that is developmentally appropriate (i.e., shorter for younger children, longer for older children), and interventions address the goals and objectives identified for each class (e.g.,

developmentally appropriate social emotional and communication skills). The budget and budget justification describe how much money is needed to fund the program and includes a music therapist salary, materials, and instruments. A list of classes, ages, and session length and frequency and the total budget are provided in Chapter 4. Detailed program information can be found in Appendix A and a detailed budget is in Appendix B. After creating the program, I began searching for appropriate grant funding.

3.3 Funding Identification

Identifying appropriate funding began with a general search using Google and a search using the University of Kentucky's Office of Philanthropy's "Find Funders" web-based tool. I used terms such as "philanthropic grants," "music," "music therapy," and "music education." I used phrases such as "grants for preschools" and more specific phrases like "grants for music therapy in preschools." The results in Google were very broad and took me to several grants databases, such as The Grant Portal (Promero, Inc., 2023). In addition to online searching, I also asked my committee chair for recommendations. Some of her suggestions included learning who funds other non-profits, disability organizations, and early childhood organizations in the area. The local business owner who gave me feedback on my program proposal mentioned that Toyota awards grants and that one of their contracts pays for music therapy using that grant.

Next, I looked up two disability organizations online: Down Syndrome Association of Central Kentucky (2022) and Family Voices (2023). I learned about Down Syndrome Association of Central Kentucky from one of my voice students who has Down Syndrome, and I found Family Voices by looking at the Kentucky Disability

Resource Guide (Human Development Institute, University of Kentucky, 2023). Family Voices values inclusion, social justice, self-advocacy, and family engagement. After looking at these values and exploring their website more, I concluded that Family Voices holds values that align with my own and with the theoretical framework for this project, the Affirmative Model of Disability (Family Voices, 2023). On July 6, 2023, I sent the following email through their contact portal:

Good afternoon,

My name is Elliott Buckner, and I am a Board-Certified Music Therapist and graduate student at the University of Kentucky. My thesis is a clinical project.

This clinical project is to write a grant proposal for a comprehensive and inclusive music therapy program at a local early learning center here in Lexington for children ages 6 weeks old through kindergarten. I am reaching out to ask if you have any grant applications. The program I am proposing fits well within your mission of inclusion and helping families of children with disabilities. I found your organization on a list of advocacy organizations. If you do not have any grant applications, I would greatly appreciate any resources you can give regarding finding funding. Thank you for your time.

Best regards,

Elliott

After reaching out to Family Voices (who I did not hear back from), I looked at the Down Syndrome Association of Central Kentucky website to gain more insight about that organization. According to their website, this association aims to support, educate,

and celebrate those with Down syndrome. The inclusive nature of my program proposal supports all disabled children, regardless of disability status or label. As such, I sent the following email to their Medical and Community Outreach Coordinator on July 18, 2023:

Good morning [redacted],

My name is Elliott Buckner, and I am a Board-Certified Music Therapist and graduate student at the University of Kentucky. My thesis is a clinical project.

This clinical project is to write a grant proposal for a comprehensive and inclusive music therapy program at The Early Learning Center at The Lexington Hearing and Speech Center for children ages 6 weeks old through kindergarten. I am reaching out to ask if you have any grant applications, and I am emailing you specifically because you are listed as the community outreach person. The program I am proposing fits well within your mission of helping families of children with Down syndrome and your vision of inclusion. I found your organization on a list of advocacy organizations. If you do not have any grant applications, I would greatly appreciate any resources you can give regarding finding funding. Thank you for your time.

Best regards,

Elliott

The Coordinator responded the next day. Because the Down Syndrome Association of Central Kentucky is a non-profit organization, they do not offer grant funding. However, they expressed interest and willingness to partner with me on a grant proposal in the future.

3.3.1 Toyota

After researching funding through these two organizations, I Googled “Toyota grants.” As mentioned previously, I knew Toyota awarded grant funding after talking with a colleague who provides music therapy services at a similar early childhood center that are funded by this company’s community grants program. The first Google search result was the overview website for grant application guidelines and instructions (Toyota Motor Sales, U.S.A., Inc., 2022a). I found the specific page for Kentucky (Toyota Motor Sales, U.S.A., Inc. 2022b) where I found “Toyota’s Mission in North America:”

At Toyota, we believe an auto company can also be a vehicle for change. That’s why Toyota is proud to partner with nonprofit organizations across the U.S. in the local communities where we live and work. Toyota and affiliates support programs in key areas:

Primary

- Education – Special consideration is given to STEM programs as we continue to develop our future workforce.
- Inclusive Mobility – Connecting people to opportunities by developing inclusive mobility solutions.
- Community Resilience – Building resilience by investing in needs required to thrive, specifically relating to environmental sustainability and driver/passenger safety.

Secondary

- Health and Human Services
- Arts and Culture

- Civic and Community

Youth and diversity are key priorities. Toyota also prefers to support program-based requests, but on occasion will support fundraising activities where most of proceeds go directly to the organization (Toyota Motor Sales, U.S.A., Inc., 2022, section 1)

The comprehensive music therapy program I developed for the ELC aligns well with Toyota's mission and supports advancement in all of the secondary program areas, which will be explained in more detail in Chapter 4 (refer also to Appendix A).

3.3.2 The Grant Application

The application to the Toyota grant required a tax identification number to access the application. As a sole proprietor, I do not have an appropriate tax identification number. However, the Associate Director of Foundation and Corporate Philanthropy gave me the University of Kentucky Research Foundation's 501(c)3 number so that I could make an account with Toyota to look at the grant requirements and application questions. It is important to note that I cannot submit the application while using this account because it lists the University of Kentucky Research Foundation as the non-profit organization, and I am not partnering with this organization on a grant.

The Associate Director of Foundation and Corporate Philanthropy also emailed me a comprehensive list of questions from the grant application in a Word document. I reviewed these questions while looking at the grant application in the portal. As they are the same exact questions, I opted to work from this Word document instead of the portal

so there was no chance of making any mistakes while logged in using the University of Kentucky Research Foundation's 501(c)3 number.

3.4 Completing the Clinical Project

This section describes the process of how I wrote my clinical project. This is included because the clinical project itself was the process of completing both the ELC program proposal and the grant proposal. Writing the final draft was an ongoing process that began as soon as the prospectus was approved. While I waited for feedback on my program proposal, I began working on Chapter 2, the literature review. Most of the literature review is from the prospectus. However, I expanded on all sections to provide more support for this type of comprehensive music therapy program. I particularly focused on literature pertaining to music, cognitive, language and communication, and social emotional development, and the intersection of these developmental areas. After completing a rough draft of this chapter, I sent the draft of Chapter 2 to a peer for review, then to my committee chair, and then to the Robert E. Hemenway Writing Center at the University of Kentucky. The order in which I received feedback was based on the availability of my peers, committee chair, and the staff at the writing center. My committee chair provided in-depth feedback on each chapter, which I applied before turning in the completed draft of my clinical project.

While I awaited feedback on Chapter 2, I began writing Chapters 1, 3, 4, and 5. The grant proposal (Chapter 4) presented the greatest challenge because of the formatting and language used in the questions. I had to consult my committee chair about verbiage pertaining to taxes, payment, and other legal information. Chapter 4 was also a key focus

of this clinical project, which is why most of my time was spent writing that chapter and the program proposal (refer to Appendix A).

After a staff tutor at Robert E. Hemenway Writing Center provided feedback on my literature review, I spent time applying their comments, edits, and revisions. Their feedback was strictly related to my writing and how I presented the literature. I applied this process of receiving feedback (peer-review, feedback from my committee chair and the Robert E. Hemenway Writing Center) to Chapters 1, 2, and 5.

In the next chapter, I present the full grant proposal to Toyota. The grant proposal includes essential information about the organization and program proposal, such as the mission statement, history, and financial details of the organization. I also include the targets, objectives, and budget for the proposed program.

CHAPTER 4. A GRANT PROPOSAL

This chapter is a grant proposal for a music therapy program at the Early Learning Center at the Hearing and Speech Center in Lexington, Kentucky, and it is directed to Toyota Motor Manufacturing, Kentucky, Inc. The Toyota grant application is an online portal with each question or section of questions on a separate webpage. For clarity and formatting purposes in the context of a thesis, I have reformatted the grant application using numbered lists under the corresponding application portal headings. Although the grant application does not call for a detailed music therapy program proposal, I have provided it in Appendix A.

4.1 Organization Information

This section contains information about the non-profit organization for which the grant is being requested. For the purposes of this clinical project, I will use the information from the target community non-profit organization and myself as the primary contact.

1. Legal Name: The Early Learning Center
2. Parent Organization: The Hearing and Speech Center
3. DBA Name: The Early Learning Center
4. Address 1: 350 Henry Clay Boulevard
5. City: Lexington
6. State: Kentucky
7. Zip: 40502
8. Main Phone: (859) 268-4545

9. Main Email: refer to contact web form (<https://hscky.org/who-we-are/location/>)
10. Website: <https://hscky.org/education/>
11. Mission Statement and History:

The Lexington Hearing and Speech Center, established in 1960, has an inclusive Early Learning Center that supports the development of approximately 160 children, ages 6 weeks to 5 years, in 13 classrooms. This Early Learning Center caters to the diverse needs of both non-disabled and disabled children. Their mission is “for children to leave HSC [Hearing and Speech Center] with the language and independence to be active participants in their community” (The Hearing & Speech Center, 2020, para. 4). The disabled children at the center mostly have disabilities that relate to speech and communication.

According to the American Music Therapy Association (2023), “Music Therapy is the clinical & evidence-based use of music interventions to accomplish individualized goals within a therapeutic relationship by a credentialed professional who has completed an approved music therapy program” (para. 1). These individualized goals are not specifically related to music per se, but can be addressed using music interventions. Some goals addressed by music therapy include improving speech and language skills; identifying, labeling, and expressing emotions; improving social skills; and improving fine and gross motor skills.

A music therapist previously provided music therapy to the Early Learning Center at the Lexington Hearing and Speech Center through grant funding, which the Early Learning Center no longer receives. In the 2022-2023 academic year, they received

services from myself and the two practicum students that I supervised from the University of Kentucky at no cost to the center as part of graduate coursework. As a board-certified music therapist, I began providing music therapy to the center during my graduate clinical placement, when I supervised two practicum students. As a graduate teaching assistant and practicum supervisor, I continued to provide music therapy services along with a practicum student for four classes at the Hearing and Speech Center once a week until May 5, 2023. Although the University of Kentucky Music Therapy Program may be able to provide intermittent practicum-based services in the future, a regular comprehensive music therapy program would holistically support the developmental needs of all the children at the center.

12. Primary Population Served: Disabled and non-disabled children ages 6 weeks through kindergarten (5-6 years old)
13. Primary Focus Area: early childhood development
14. Organization Primary Contact: Laura Elliott Buckner, MT-BC
15. Contact Information: laura.buckner@uky.edu

4.2 Information Request

This section contains information pertaining to tax exempt status, W-9, and deductibles, which I will omit for the purposes of this clinical project. This section also includes brief information about the program itself such as the title, budget, proposed start and end dates, program description, program initiative areas, and geographic scope.

16. W-9: To be completed by the non-profit organization.

17. Program Title: A Comprehensive Music Therapy Program at an Inclusive Early Learning Center
18. Support Type: To be completed by the non-profit organization.
19. Requested Cash Amount: To be completed by the non-profit organization.
20. Non-deductible Amount: To be completed by the non-profit organization.
21. Non-deductible Type: To be completed by the non-profit organization.
22. Total Program Cost: \$32,935
23. Is the Overhead Negotiable: To be completed by the non-profit organization.
24. Program Budget File: Refer to Tables 3-5 in Appendix A.
25. Program Start Date: August 22, 2024
26. Program End Date: December 19, 2024

These dates are based on the 2023-2024 Fayette County Public Schools academic year. This budget includes start-up equipment (\$2,675) and one semester (17 weeks) of services (\$30,260) and would be lower in subsequent years (estimated \$61,700 per year, including equipment maintenance and 2% inflation).

27. Program Description (2000 character maximum):

The proposed music therapy program at the Early Learning Center will be informed by the mission of the center and goals I identified in previous clinical assessments and experiences at the center (improving social emotional and communication skills). Each week, the sessions follow a similar format: musical opening/welcome, movement intervention, primary music intervention(s), cool down musical intervention, and musical goodbye/closing. I will build on this format because

the teachers and children have responded positively to this structure. All classes will follow this format and address the goals and objectives identified for each class. I will incorporate a strategic plan for individual sessions and that includes developing relationships with other therapists for co-treatment opportunities as a future step (e.g., with speech therapists, audiologists). All classes meet twice per week to provide repetition and enhance learning and retention. A list of the classes, ages, and length of session in minutes are provided in Table 2.

Table 2

ELC Classrooms and Session Times

Classroom	Age	Session Length (2x per week)	Total time per week
<i>Infants</i>			
Roly Polys	6 weeks to 9 months	20 minutes	40 minutes
Caterpillars	9 months to 15 months	30 minutes	1 hour
<i>Toddlers</i>			
Butterflies	15 months to 22 months	30 minutes	1 hour
Ladybugs	2 years	30 minutes	1 hour
Grasshopper 1s	2 years	30 minutes	1 hour
Grasshopper 2s	2 to 3 years	30 minutes	1 hour
<i>Preschool</i>			
Robins	3 to 4 years	30 minutes	1 hour
Canaries	3 to 4 years	30 minutes	1 hour
Cardinals	3 to 4 years	30 minutes	1 hour
Doves	4 to 5 years	40 minutes	1 hour 20 minutes
Hummingbirds	4 to 5 years	40 minutes	1 hour 20 minutes
Blue Jays	4 to 5 years	40 minutes	1 hour 20 minutes
<i>Kindergarten</i>			
Owls	5 to 6 years	40 minutes	1 hour 20 minutes

Individual sessions	Varies (12 children)	30 minutes	6 hours
TOTAL Per Week			20 hours

As outlined in Table 2, class times are based on the developmental level of the children (e.g., nap schedule, attention span) as well as my clinical experience with children at the center. Each class will have music therapy twice a week. The weekly schedule will be determined in collaboration with the Director and classroom teachers. I will also budget time for up to six hours of individual sessions per week.

28. Program Initiative Area (select from Disaster; Driver/Passenger Safety; Environmental Sustainability; Financial Inclusion; Mobility; N/A; STEM Education; Workforce Readiness): N/A
29. Program Activities (select from Arts & Culture; Civic & Community; Disaster Relief; Education k-12; Education pre-k; Health & Human Services; Leadership Development; Post-Secondary Education): Arts & Culture, Civic & Community, Education pre-k, Health & Human Services
30. Environment or Automotive Safety Focus (select from Environment; Automotive Safety; N/A): N/A
31. Geographic Scope (select from Local; Regional; National): Local
32. County Distribution? (will this grant be distribution to multiple counties throughout the US): No
33. Primary County Region (select region of country program will benefit): Lexington-Fayette County, Kentucky, USA
34. Primary County %: 100%

35. Local, State, or Federal Support (describe any support you receive from local, state, or federal government entities, otherwise enter N/A): N/A
36. Other Supporters (are there other supporters? If yes, at what capacity/sponsorship level?): N/A
37. Other Automotive Supporters (are there other automotive and/or automotive finance supporters? If yes, at what capacity/sponsorship level?): N/A
38. Toyota Internal Requestor Affiliation: TMMK (Toyota Motor Manufacturing, Kentucky, Inc.)
39. CRA Eligibility: N/A

4.3 Program Objectives

The following section contains the program objectives, targets, and sustainability. It also contains information about Toyota's involvement and how they will benefit from the program.

40. Program Objectives (2000 character maximum):

Objectives of this program include: a) enhancing early childhood development through use of music interventions; b) providing services to the community at no charge to the parents or caregivers; and c) improving overall well-being of the children. Music therapy in early childhood targets language, communication, and socio-emotional development by utilizing the elements of music, such as rhythm, melody, style, and dynamics. For example, in a preschool music therapy session, a music therapist may implement instrument play interventions during which the music therapist sings the directions for playing the instrument and then assesses the children for following the

directions and the motor skills used while playing the instrument. Music therapists also use social songs (social stories set to music) to help children learn social communication skills. The teachers at the ELC focus on teaching communication skills and social skills that help children reach developmental milestones (The Hearing & Speech Center, 2020). Music therapists often facilitate the development of social communication through use of music games and movement activities.

Music therapists use their knowledge of musical development to aid the development of other skills in the domain areas of cognition, language and communication, fine and gross motor skills, and socio-emotional skills (Humpal, 2018). Because of the nature of music and child development, Humpal (2018) concludes that “developmentally appropriate music therapy acknowledges the young child's world is permeated by playful use of music that not only builds music awareness and skills but is also a powerful tool for addressing non-music goals in an enjoyable, meaningful, and effective manner” (p. 172).

41. Program Targets (2000 character maximum):

Each week, the sessions follow a similar format: opening/welcome, movement intervention, primary intervention(s), cool down intervention, and goodbye/closing. Sometimes there are multiple cool down and movement interventions depending on the needs of the children on that specific day, which is determined through assessment in the session and is typical of a music therapy session (i.e., flexibility). I plan to build on this format, which has worked successfully in pilot programming in the past (i.e., through graduate coursework), and all the classes will follow this general format with music

experiences tailored to address the goals and objectives identified for each class. The primary goals for all classrooms will be to support language, communication, and socio-emotional development at an age-appropriate level. Specific functional target behaviors include the following: following directions, answering questions, identifying and labeling emotions, expressing emotions, sharing with others, and taking turns. I will incorporate a strategic plan for individual sessions (i.e., one-on-ones), including plans for developing relationships with other therapists for co-treatment opportunities as a future step (e.g., with speech therapists, audiologists). I will ask the Director of the ELC to connect me to them via email so that I may set up a time to talk with them, build rapport, and identify ways in which our services might complement one another. Other specialists at the center, classroom teachers, volunteers, parents, and caregivers may not be aware of what exactly happens in music therapy. Therefore, I will regularly prepare educational materials as part of the comprehensive program (e.g., a newsletter, flyers, short talks and demonstrations at professional development days and open houses).

42. Program Sustainability (2000 character maximum):

This comprehensive music therapy program is designed to facilitate early childhood development in an inclusive center for children with and without disabilities. Once established, the program will be sustained by donors, fundraisers, and various benefactors. The Hearing and Speech Center has several community events throughout the year to raise money for the Hearing and Speech Center as a parent organization and for the ELC specifically. Furthermore, the instrument budget will decrease significantly after establishing the program in the first year; subsequent years will require a smaller

annual budget for repairs, replacements, and equipment updates, as described in the budget.

43. Toyota Funding (how will Toyota's funds be used? (2000 character maximum)):

Toyota's funds will be used to purchase instruments; multisensory materials and supplies for visual aids (e.g., paper, felt, puppets, special lights, markers); and will be used for the Board-Certified Music Therapist's salary.

The salary for the MT-BC is based on experience, education level, national and regional averages from the American Music Therapy Association and incorporates time for planning and documentation in addition to time spent with children in session. According to the American Music Therapy Association Workforce Analysis (2021), the average yearly salary for a music therapist in the Southeastern region was \$53,032. The mean, median, and mode of hourly rate for group music therapy in the southeastern region was \$86.13, \$90, and \$100, respectively. These averages are based solely on client-contact hours. Client-contact hours do not include the extra time spent for documentation and planning. For example, 20 client-contact hours requires approximately 20 non-client-contact hours for planning, documentation, and other administrative duties such as attending meetings. In other words, the program proposal is for a full-time position. The music therapist in this position will bill for client-contact hours, but the rates are set to consider the time spent on non-client-contact hours.

The materials included in the budget are basic materials required to start a music therapy program. Cleaning supplies are required for infection and disease control protocols. Other materials assist with artistic and creative expression on the parts of the

children and the therapist and to provide multiple means of representation using age-appropriate visual aids and manipulatives (e.g., puppets).

Quality musical instruments that are versatile and age-appropriate for the range of ages at the Early Learning Center are required to establish the music therapy program. These instruments provide rhythmic and melodic variety. Also, if the instruments are purchased by the center itself, then the Early Learning Center will be able to keep them should the music therapist seek employment elsewhere. Thus, these expenses will not be incurred each year. Occasionally, instruments will need to be repaired or replaced, but purchasing the instruments themselves is not an annual expense.

44. Will Toyota receive material benefits for this contribution (select yes or no)? No

45. How will Toyota be recognized (2000 character maximum):

Toyota will be listed as the benefactor for the program in monthly newsletters to the parents and community members, all program flyers, and promotional materials. With parental permission, the children will create thank-you videos recognizing Toyota for their contribution to the program.

46. Toyota Employee or Dealer Involvement (were you asked to apply by a Toyota rep or dealer?): No

47. Additional objectives or comments (2000 character maximum):

Music serves many roles, from entertainment to enriching childhood development. According to Gordon's Music Learning Model (2012), at as early as two weeks old, an infant with typical hearing will stop moving when they hear a sound, regardless of what that sound is. By two months old, infants can focus their attention

when being sung to. By the age of six months, infants can move their whole body to music (Gordon, 2012; Humpal, 2018; Schwartz, 2008). In addition to the bodily responses to music, the effects of music on various cognitive skills related to speech and reading have been studied by several researchers (Bergman Nutley et al., 2014; Flaunacco et al., 2015; Zhau & Kuhl, 2016).

Music facilitates emotion regulation (ER). ER describes how a person returns to an emotional homeostasis after changes in emotion. In a systematic review, Sena Moore (2013) found that music can activate certain parts of the brain that underlie physiological and ER (e.g., orbitofrontal cortex, prefrontal cortex) based on its emotional relevance (or the lack thereof) to the listener. Physiologically, music can help regulate bodily responses, such as changing heart and respiration rates to the musical beat in times of distress, which may facilitate a sense of comfort (Edgar, 2019; Schwartz, 2008). Music also provides structured and predictable auditory stimulation that can be manipulated to increase tolerance for various sensory stimuli (Schwartz, 2008). Because music influences physiological responses, provides opportunities to do things together, and opportunities to self-direct, it can support ER development (Sena Moore & Hanson-Abromeit, 2015; 2018).

Several teachers expressed their appreciation for the music therapy I provided in their classroom when I was a graduate teaching assistant. Teachers stated that the children were better at focusing on the tasks at hand and that they demonstrated better social and communication skills. Some of the teachers of the classes I did not work with approached me and asked me why I did not work with them. These experiences further

demonstrated an interest and need for a comprehensive music therapy program at the ELC.

4.3.1 Program Beneficiaries

48. If the program/event is a fundraiser, please provide the number of people participating in the fundraising event: N/A
49. Does your organization primarily serve animals, wildlife, or environment? No

4.4 Congressional Involvement

The following section is a list of questions that ask about government funding and congressional involvement. These questions are not applicable to my program but are included in this chapter, as they are part of the grant application.

50. Is this contribution or the charity for which it is intended involved in any way with any covered federal official? No
51. Members of Congress (If you are a Member of Congress or an employee of either the U.S. House of Representatives or the U.S. Senate or a covered Executive Branch official, list your name and title here, otherwise N/A.): N/A
52. Established By (If this organization was established by one or more Members of Congress or a covered Executive Branch official, please list their names here, otherwise N/A.): N/A
53. Named For (If this organization was named for a current Member of Congress, please list their name and titles here, otherwise N/A.): N/A
54. Controlled by/Active Participant (If this organization is controlled by a current Member of Congress, Congressional Staff Member, a covered Executive Branch

official, or has an active participant on the board of directors, please list their name(s) and titles(s) here, otherwise N/A.): N/A

55. Honoring or Recognizing (If this contribution is for an event honoring or recognizing a Member of Congress or a covered Executive Branch official, please enter their name and title here, otherwise N/A.): N/A

4.5 Payment Information

This information includes the name, address, and banking information for the organization receiving the funds. Considering that this is not the actual submitted grant proposal, I have left it blank except for the city and state. This area will be filled out once I partner with a non-profit organization and complete the grant application in partnership with them.

56. Payee Name 1:
57. Payee Name 2:
58. Payee Address 1:
59. Payee City: Lexington
60. Payee State: Kentucky
61. Payee Zip:
62. Payment Contact Name:
63. Payment Contact Phone:
64. Payment Email:
65. ACH Authorization:

CHAPTER 5. REFLECTION

The purpose of this clinical project was to develop a comprehensive music therapy program for the Early Learning Center (ELC) at the Lexington Hearing and Speech Center and a grant proposal to fund this program. My process involved developing a program proposal, finding an appropriate funding source, creating a grant proposal for said funding source, and receiving and implementing feedback. This clinical project is a culmination of my work at the University of Kentucky. Considerable time was spent in reflection throughout the process of completing this clinical project. This particular choice of clinical project was very difficult because I did not have any examples from the University of Kentucky music therapy program, and there were not many examples I could learn from, except for master's theses in the field of social work and non-thesis examples in music therapy (e.g., books and book chapters, conference presentations). I had not heard of a grant proposal as an option for a clinical project before the Fall 2022. I had only read theses in the form of research studies up to that point. In the following sections, I will reflect on this learning process by discussing the barriers to identifying a funding source; academic, professional, and personal insights; connections to the theoretical framework; and contributions to music therapy.

5.1 Barriers to Identifying a Funding Source

The barriers for identifying a funding source began from the very first Google search. There were numerous search results that showed up and deciding on an appropriate funding source from those options was overwhelming. Furthermore, most grants identified in both Google and the "Find Funders" web-based tool were research-

focused funding opportunities, which were not appropriate funding sources for this project. Of the philanthropic grants available, most were for non-profit organizations. I am an independent contractor and self-employed, but I am not an organization. Therefore, I was not eligible for these grants. I overcame this first barrier after my committee chair prompted me to draft a grant proposal for the Toyota grant, as my program proposal fit all the criteria except for being a non-profit organization. This was an appropriate solution. I planned not to submit the grant proposal as part of my clinical project, but I can partner with a non-profit organization in the future to submit the proposal.

Another significant barrier concerned communication between me and the community partner, the ELC director. I built a positive relationship with her during my graduate clinical placement and time as a teaching assistant, and she expressed interest in working with me on my project. I emailed her at the end of January 2023, informing her in writing of my clinical project and asking if I could partner with the ELC to create a comprehensive music therapy program for the ELC. The director responded to the initial email at the beginning of February and expressed interest. She stated, “We would love to help you with this. Let me think about some answers and look up any other grant information we may have used in the past. We would love to have you everywhere. The kids and staff love music days” (K. Smart, personal communication, February 2, 2023). While I was finishing the program proposal in April 2023, I asked the director for a roster of classes. I received an automated response that she was out of town and to reach out to

her assistant. Despite following up with the director and other ELC staff, I never received further communication after April 2023. To this day, I am still unsure what happened.

The shift from initial excited interest to lack of communication was very concerning and frustrating. It left me questioning everything related to this project. I re-read my emails several times, gave an appropriate amount of time before sending follow-up emails, and consulted with my committee chair on next steps. I had to reassure myself often that I was doing all the right things and that this lack of communication was not my fault. Considering that my clinical project was not to administer the program, the lack of communication did not halt my progress, but it made it more difficult to locate a funding source.

A third barrier in my project was a general inability to access grant requests for proposals. Some requests for proposals are behind a paywall, such as those on The Grant Portal (Promero, Inc., 2023). If I was a well-established LLC, paying for a subscription may have been worth the investment, but as a self-employed, independent contractor in graduate school, that was not feasible. However, I was able to access brief descriptions of grant opportunities and use filters to search for requests for proposals.

A final consideration of barriers is that some proposals, such as the Toyota grant, are on private portals that require a 501(c)3 number. The Associate Director of Foundation and Corporate Philanthropy at the University of Kentucky thankfully provided a list of the questions from the request for proposals. Had she not helped me in this way, I would not have been able to complete the grant proposal for Toyota. I am

grateful to the Associate Director for her help in accessing the grant proposal and requirements.

5.2 Insights

In addition to reflecting on the barriers to identifying funding, I gained many insights while completing this clinical project. These insights are related to academic, professional, and personal facets of my life.

5.2.1 Academic Insights

Most of the academic insights I gained over the course of the last year are related to my writing and research capabilities. I have completed several literature reviews and cumulative projects over the course of my post-secondary education. However, none of those projects compared to the time and resources required to complete this comprehensive clinical project. This project alone has over 50 references. In order to complete this project, particularly the literature review, I utilized the research skills I gained in MUS 600: Introduction to Research. These skills include online search strategies, how to read research, and how to create citations for nearly every type of source imaginable. I did not think I would be able to put these skills into practice. However, I was able to do so with lots of help from my committee members, peers, and the staff at the Robert E. Hemenway Writing Center at the University of Kentucky.

The feedback I received on previous projects was not as intense. That feedback was more direct and specific. However, the feedback I received on this project from my committee members, peers, and the staff at the writing center challenged me in ways I did not expect. While I did receive direct and specific feedback, I also received feedback

about my overall writing style and how to improve my writing and research capabilities. I had to completely rethink how I approach writing. Even with chapter and section outlines, I struggled to put my thoughts on paper in a professional and academic manner. Sometimes, I would sit at my computer for an hour and only type one paragraph. However, those around me kept reinforcing the concept of quality over quantity. I would often feel discouraged that my clinical project was not 200 pages. I would feel like I was not doing enough. However, like clinical writing, I have learned to be as concise as possible in my academic writing as well. I have grown exponentially.

5.2.2 Professional Insights

The original hope for the future of this project was to submit the grant proposal to Toyota in partnership with the ELC at the Lexington Hearing and Speech Center. The grant funding would allow for the staff at the center and myself to establish a comprehensive music therapy program. I would be paid a salary with a fair, living wage, and the children would receive music therapy services at no cost to their parents or guardians nor to the center. However, due to the lack of communication from my community partner, this plan appears no longer feasible. Nonetheless, through this experience, I have gained the knowledge and confidence to reach out to other organizations (such as Down Syndrome Association of Central Kentucky) with a well-formed program proposal and can partner with them to refine it and apply for this grant funding.

The experience I gained during this process has also equipped me with the skills necessary for jobs such as project manager, grant writer, and various other administrative

careers. I learned how to design a program and write proposals, and the communication skills I gained from this experience are invaluable. I communicated clearly and often with my community partners and expressed my needs, but I was not overbearing – I asked for their needs and did my best to anticipate them when the community partners did not clearly communicate their needs. I was able to complete the program proposal based on what I already knew about the program, even when my questions were left unanswered. This ability to anticipate and address needs is an essential skill for any project manager or supervisor. These skills are also necessary for any music therapy business owner.

Overall, the professional skills I gained while completing this clinical project have helped me feel more confident about my ability to financially support myself. I feel more equipped to prepare sessions and develop programs. I also feel more equipped to take established programs and make them my own, meaning that when I step into a new position, I do not feel like I have to do everything exactly like the preceding music therapist. I can build a strong foundation and trust in my own growing clinical wisdom.

5.2.3 Personal Insights

This clinical project in the form of a thesis was not just another assignment for another class. I learned so much about myself as a person while completing this work. I gained more experience coping with disappointment (e.g., when my community partner stopped communicating with me). I improved my social skills by reaching out to professionals I had never met (e.g., the person in the Community Outreach role at Down Syndrome Association of Central Kentucky), and I learned how to establish healthy boundaries in my personal life, work life, and academic life. The skill of

compartmentalization did not come easily to me. I tend to draw on personal experiences to inform my clinical wisdom. While I still do that, it is important to find balance among personal, professional, and academic pursuits.

I learned this balance by experiencing both immense losses and gains in my personal and professional life while completing my thesis (academic life). It was one of the most painful experiences I have ever gone through. When I first experienced this grief, I thought it would derail my progress on my clinical project. By contrast, it urged me to be more dedicated to my professional and academic pursuits. I would be vulnerable and feel my grief in personal therapy every two weeks. Then, I could focus on my writing after acknowledging my feelings about my personal losses. I was and still am very dedicated to working through this grief by putting in the hard work: reflecting on my actions, validating my feelings, and learning from my mistakes.

I also learned how to better prioritize my time between work and academic pursuits. This skill goes in this section because learning to prioritize what is important is a universal skill. I was able to use my time management skills to navigate starting a new music therapy position out of town while still completing this clinical project. I balanced my time so I would maintain a consistent writing schedule, complete my documentation and session planning, and still have time to rest with my service dog, Daisy (along with doing other things we enjoy).

5.3 Connections to the Theoretical Framework

Several of the children at the ELC are autistic, d/Deaf, hard-of-hearing, or have some other disability that affects their receptive and expressive communication skills.

These identities are necessary to consider when creating a comprehensive music therapy program. In Chapter 2, I wrote about how music can help with communication and social-emotional skills; however, here I will reflect on how the Affirmative Model of Disability influenced my decision-making.

The Affirmative Model of Disability extends beyond consideration of societal barriers and asserts that while societal structure is disabling to those with various impairments, even if all of these various barriers were removed, impairments would still impact the disabled individual in some way (Cameron, 2010; Rickson, 2014; Swain & French, 2000). While I provided music therapy services at the ELC and developed the program proposal, I considered the children's various disabilities and developmental levels. If I were to have used the Social Model of disability, I would have solely focused on the social, environmental, and attitudinal barriers that prevent the children from fully benefiting from music therapy. However, using the Affirmative Model of Disability, I also considered how the impairments (the physical, mental, and/or emotional diagnoses) affected the children even after I removed the barriers present in the session. For example, when I developed the program proposal, I considered listening fatigue when determining the session length. Listening fatigue is a phenomenon that happens when deaf and hard-of-hearing people have to exert more physical and mental energy to engage in a hearing society (Hornsby et al., 2017). Even when barriers are removed by adaptive technology or simultaneous communication (signing and verbally communicating at the same time), deaf and hard-of-hearing people still have to exert more energy to concentrate than their hearing counterparts (American Academy of Audiology, 2022).

Referring to my clinical wisdom and literature relating to childhood development and music (refer to Chapter 2), 45-minute sessions would be appropriate for a kindergarten class with all hearing students. However, to account for listening fatigue, I decided on 40-minute sessions for the preschool and kindergarten classes, with the last five to ten minutes of each session dedicated to a cool down. I used music that was less stimulating and required less focused attention (refer to Appendix A).

I also thought about how I talk about disability. In my personal statement (refer to Chapter 1), I said that I would use identity-first language throughout this clinical project. I used identity-first language in the program proposal (refer to Appendix A) and the grant proposal (refer to Chapter 4). I default to identity-first language in my personal, professional, and academic life to affirm the disabled person's experience and foster a sense of pride, community, and acceptance for the disability community.

In summary, the Affirmative Model of Disability informed every decision I made in this project, from the references and resources I used, to how I communicated with others, and even the funding source I chose (i.e., I looked at the Toyota grant website for any language or principles that contradicted the Affirmative Model of Disability and found none). In the final section I describe how this clinical project and its connection to the Affirmative Model of Disability contribute to the music therapy profession.

5.4 Contributions to Music Therapy

This clinical project is important to the music therapy profession because music therapy is not a licensed profession in all 50 states. Licensure helps increase access to equitable care, and grant funding does the same. Not all early childhood centers have

access to this type of comprehensive music therapy program. This clinical project – the process of creating a comprehensive music therapy program and grant proposal – offers a resource to help future music therapists learn the steps of developing a program and applying for grant funding. This clinical project also contains information about the importance of communication with your community partners and what to do if communication issues arise. Furthermore, this clinical project and its connection to the Affirmative Model of Disability contribute to the field of music therapy as a resource that many may not yet be familiar with.

5.4.1 Music Therapy and the Affirmative Model of Disability

I did not know much about the Affirmative Model of Disability before I completed this clinical project. When I started looking into it, I found that the literature about the Affirmative Model of Disability was lacking. The Affirmative Model of Disability dates to 2000, but there are only a handful of sources that address it (Cameron, 2010; McCormack & Collins, 2010; Rickson, 2014; Swain & French, 2000). This clinical project is an addition to that literature. Furthermore, I have provided an example of how one can implement the Affirmative Model of Disability in a specific music therapy setting. When I did my initial search, there were less than 30 results when I Googled “music therapy” and “affirmative model of disability.”⁶ In my professional pursuits, I hear other music therapists use offensive language (e.g., “special needs,” “differently abled”) or defaulting to person-first language without even knowing that they could

⁶ Original Google search link: "[music therapy" AND "affirmative model of disability"](https://www.google.com/search?client=safari&rls=en&q=%22music+therapy%22+AND+%22affirmative+model+of+disability%22&ie=UTF-8&oe=UTF-8#ip=1) (<https://www.google.com/search?client=safari&rls=en&q=%22music+therapy%22+AND+%22affirmative+model+of+disability%22&ie=UTF-8&oe=UTF-8#ip=1>)

potentially be harming their clients/patients/students (Rudy, 2022). In this clinical project, I have provided information about the language surrounding disability. In doing this, I hope people will read my clinical project and reflect on how they talk and think about disability and disabled people both individually and as a community.

5.5 Lessons Learned

In addition to insights and connections to music therapy, completing this clinical project also taught me some things I would do differently the next time I write a grant proposal. To begin, I would devote more time to the initial search for requests for proposals. If I had spent more time searching for individual grants, I might have been able to find one I could apply for as an individual, since I am not a non-profit organization. Additionally, if I had found a request for proposals for individuals, then I may have had less difficulty accessing the questions and requirements like I did with the Toyota grant. Another lesson I learned was that I should have a list of potential community partners when thinking about applying for a grant. The lack of communication from my initial community partner was very disappointing, and if I had had a back-up community partner (e.g., a contact at another early learning center), then I would feel more comfortable turning this clinical project into a job opportunity. Completing this clinical project sparked some ideas for future research. The way I established a community partnership was through an institution of higher education, and the other two organizations I reached out to (refer to Chapter 3) were “cold call”-type emails after looking up their information online. That method of reaching out to potential community partners sparked my interest in how to broaden my professional network. In

summary, I learned to not rush the initial search for grant requests for proposals, to have multiple possible community partners, and to research more sustainable ways to build my professional network.

5.6 Conclusion

In summary, this clinical project is the process of creating a comprehensive music therapy program for an inclusive early learning center and completing a grant proposal for that program. I evaluated my privilege and marginalization and how that impacts me as a clinician, and I described the theoretical framework that I applied to this project. Then, I provided ample literature supporting the use of music and music therapy in an inclusive early learning center. Chapter 3 is a detailed description of how I completed this project, followed by the grant proposal itself in Chapter 4. I closed with a reflection of what I learned and the barriers I encountered while completing this clinical project.

Completing this clinical project left me with a lot to process. My committee chair was not wrong when she said writing a thesis is like riding a rollercoaster. There were so many ups and downs and abrupt twists and turns to navigate. Sometimes it felt like time was flying by, and other times it felt like I would never finish. However, going through the process of developing a comprehensive music therapy program, identifying funding, and writing a grant proposal taught me how to navigate barriers and reflect on many parts of my life. This clinical project also has the potential to help other music therapists and students learn about the details of creating a comprehensive music therapy program in an early childhood setting and how to go about finding funds to establish a sustainable program.

APPENDICES

Appendix A: Program Proposal

A Comprehensive Music Therapy Program for an Inclusive Early Learning Center

Laura Elliott Buckner, MT-BC

Abstract

I provided music therapy services at no charge to the Early Learning Center at the Lexington Hearing and Speech Center once per week for an entire school year. The purpose of this program proposal is to build on these initial services and develop a comprehensive music therapy program for the Early Learning Center. Thirteen classes will receive music therapy twice a week, and a maximum of 12 children will receive weekly individual music therapy sessions. The budget presented in this proposal covers one semester (18 weeks) of music therapy services by me, a board-certified music therapist. The program will be evaluated based on teacher feedback and satisfaction and the children's progress towards their goals and objectives, determined by collaboration among the classroom teachers, other therapists, and myself.

Background

The Lexington Hearing and Speech Center, established in 1960, has an inclusive Early Learning Center that supports the development of approximately 160 children total, ages 6 weeks-Kindergarten in 13 classrooms annually. This Early Learning Center caters to the diverse needs of both non-disabled and disabled children. Their mission is “for children to leave HSC with the language and independence to be active participants in their community” (The Hearing & Speech Center, 2020, para. 4). The disabled children at

the center mostly have disabilities relating to speech and communication. A music therapist previously provided music therapy to the Early Learning Center at the Lexington Hearing and Speech Center through grant funding which they no longer receive. and from myself, a music therapy graduate teaching assistant, and practicum students from the University of Kentucky at no cost to the center. As a board-certified music therapist, I began providing music therapy to the center during my graduate clinical placement. Along with my practicum student, I have continued to provide music therapy services for four classes at the Hearing and Speech Center once a week as part of my graduate teaching assistantship. Although the University of Kentucky Music Therapy Program may be able to provide intermittent music therapy practicum-based services in the future, a regular comprehensive music therapy program that supports the developmental needs of all the children at the center should be established. To support the need for this comprehensive and inclusive program, I will briefly review literature on the use of music and music therapy in early childhood.

Music and Early Childhood

The literature surrounding early childhood development is expansive and dates back to as early as the early 1900s (Manny, 1910; Piaget & Cartalis, 1928). Current literature about early childhood development includes topics ranging from cognitive skills and reading interventions to behavioral and emotional disorders to parental bonding and social skills (Kucirkova & Tolsum, 2023; Tesson et al., 2022; Thümmeler et al., 2022). A common tool that can be used to address all of these skills is music (Humpal, 2018).

Music serves many roles, from entertainment to enriching childhood development. According to Gordon's Music Learning Model (2012), at as early as two weeks old, an infant with typical hearing will stop moving when they hear a sound, regardless of what that sound is. By two months old, infants can focus their attention when being sung to. By the age of six months, infants are able to move their whole body to music (Gordon, 2012; Humpal, 2018; Schwartz, 2008). In addition to the bodily responses to music, the effects of music on various cognitive skills related to speech and reading have been studied by several researchers. Some of their findings will be summarized below.

Music Therapy and Inclusive Early Childhood Settings

Music therapy is the use of music by a credentialed music therapist to address non-musical goals including, but not limited to, cognitive skills, social-emotional skills, language and communication skills, and fine/gross motor skills (American Music Therapy Association, 2023). Music therapy in early childhood involves improving child development of said skills by utilizing the elements of music, such as rhythm, melody, style, and dynamics. For example, in a preschool music therapy session, a music therapist may implement instrument interventions during which the music therapist sings the directions for playing the instrument and then assesses the children for following the directions and the motor skills used while playing the instrument. Music therapists also use social songs (social stories set to music) to help children learn social communication skills. The teachers at the Early Learning Center focus on teaching communication skills and social skills that help children reach developmental milestones (The Hearing &

Speech Center, 2020). Music therapy supports the development of these skills because music therapists often facilitate the development of social communication through use of music games and movement activities.

Auditory skills begin developing in a fetus as young as 18 weeks' gestation, and musical detection skills are documented at as young as two months old, which means that music is an appropriate therapeutic medium for this age group (Standley & Walworth, 2010). While musical skills are not often the primary target behavior in music therapy, music therapists take the children's musical development into consideration when planning interventions and plan so that the children can be the most successful. Music therapists use their knowledge of musical development to aid the development of other skills in the domain areas of cognition, language and communication, fine and gross motor skills, and socio-emotional skills (Humpal, 2018). Because of the nature of music and child development, Humpal (2018) concludes that "developmentally appropriate music therapy acknowledges the young child's world is permeated by playful use of music that not only builds music awareness and skills but is also a powerful tool for addressing non-music goals in an enjoyable, meaningful, and effective manner" (p. 172).

Approach

The proposed music therapy program at the Early Learning Center at the Lexington Hearing and Speech Center will be informed by the mission of the center and goals I identified in previous assessments and experiences at the center (improving social emotional skills and communication skills). In Spring 2023, I led two classes and supervised an equivalency student who led two classes. These groups consisted of an

older infant class, a toddler class, and two preschool classes. The infant and toddler classes were fifteen minutes long, and the preschool classes were forty minutes long. This was based on the developmental level and attention span of the children in each class. However, after working with the infant and toddler classes each week for an entire school year, I have used my clinical wisdom and the actions of the children and teachers to determine that the two fifteen-minute classes can be longer. A more detailed list of classes, ages, and length of session can be found later in this section.

Each week, the sessions follow a similar format: opening/welcome, movement intervention, primary intervention(s), cool down intervention, and goodbye/closing. Sometimes there are multiple cool down and movement interventions depending on the needs of the children on that specific day. I plan to build on this format, and because the teachers and children have responded positively to this structure, all of the classes will follow this format and address the goals and objectives identified for each class. The primary goals for all classrooms will be to support language, communication, and socio-emotional development at an age-appropriate level. I will incorporate a strategic plan for individual sessions, including plans for developing relationships with other therapists for co-treatment opportunities as a future step (e.g., with speech therapists, audiologists). I will ask the Director of the Early Learning Center to connect me to them via email so that I may set up a time to talk with them, build rapport, and identify ways in which our services might complement one another. Other specialists at the center may not be aware of what exactly happens in music therapy, so I will prepare educational materials as part of the comprehensive program.

Classes

Table 2 is a list of the classes, ages, and length of session (in minutes).

Table 3

ELC Classrooms and Session Times

Classroom	Age	Session Length (2x per week)	Total time per week
<i>Infants</i>			
Roly Polys	6 weeks to 9 months	20 minutes	40 minutes
Caterpillars	9 months to 15 months	30 minutes	1 hour
<i>Toddlers</i>			
Butterflies	15 months to 22 months	30 minutes	1 hour
Ladybugs	2 years	30 minutes	1 hour
Grasshopper 1s	2 years	30 minutes	1 hour
Grasshopper 2s	2 to 3 years	30 minutes	1 hour
<i>Preschool</i>			
Robins	3 to 4 years	30 minutes	1 hour
Canaries	3 to 4 years	30 minutes	1 hour
Cardinals	3 to 4 years	30 minutes	1 hour
Doves	4 to 5 years	40 minutes	1 hour 20 minutes
Hummingbirds	4 to 5 years	40 minutes	1 hour 20 minutes
Blue Jays	4 to 5 years	40 minutes	1 hour 20 minutes
<i>Kindergarten</i>			
Owls	5 to 6 years	40 minutes	1 hour 20 minutes
Individual sessions	Varies (12 children)	30 minutes	6 hours
TOTAL Per Week			20 hours

The times for these classes were decided based on the developmental level of the children and my own clinical experience with the Caterpillars, Butterflies, Doves, and Hummingbirds. Each class will have music therapy twice a week. The weekly schedule

will be determined after meeting with Kim and the other teachers. I will also budget time for up to six hours of individual sessions per week.

Budget

The budget for this program covers one semester of music therapy services (17 weeks). Each class will receive music therapy twice a week (14 total hours of student contact per week), and up to twelve students may receive one 30-minute individual session per week (six total hours of student contact per week). A budget spreadsheet will be attached to the grant proposal portal and is presented here in Tables 4-6 for the first two years of the program.

Table 4

Start-Up Budget (First Semester)

Budget Item	Description	Cost Estimate (17 weeks)
Salary for a board-certified music therapist (MT-BC)	<ul style="list-style-type: none"> • 20 hours student contact per week • Average hourly rate of \$89 per hour (accounts for assessment, planning, documentation, team meetings, family meetings) • Weekly salary for MT-BC is \$1,780 	\$30,260
Musical Instruments	<p><i>Sample set of instruments</i></p> <ul style="list-style-type: none"> • Buffalo drums • Lollipop drums • Set of boomwhackers • Set of rhythm sticks • Set of egg shakers • Djembes • Cabasas • Gathering drum 	\$2,000 (includes tax and shipping)

Materials	<ul style="list-style-type: none"> • Bongos Disinfectant wipes, paper, pens, markers, printer ink, and other various supplies to support multiple means of representation (e.g., visual aids).	\$675
TOTAL		\$32,935

Table 5

Budget for the Second Semester of the New Music Therapy Program

Budget Item	Description	Cost Estimate (17 weeks)
Salary for a board-certified music therapist (MT-BC)	<ul style="list-style-type: none"> • 20 hours student contact per week • Average hourly rate of \$89 per hour (accounts for assessment, planning, documentation, team meetings, family meetings) • Weekly salary for MT-BC is \$1,780 	\$30,260
TOTAL		\$30,260

Table 6

Annual Budget for Subsequent Years

Budget Item	Description	Cost Estimate (34 weeks)
Salary for a board-certified music therapist (MT-BC)	<ul style="list-style-type: none"> • 20 hours student contact per week • Average hourly rate of \$90 per hour (accounts for assessment, planning, documentation, team meetings, family meetings; 2% inflation) 	\$61,200

	<ul style="list-style-type: none"> • Weekly salary for MT-BC is \$1,800 	
Musical Instruments and Materials	<ul style="list-style-type: none"> • Maintenance, replacements, updates 	\$500
TOTAL		\$61,700

Budget Justification

Below is a budget justification for each category of the budget.

MT-BC Salary

The salary for the MT-BC is based on experience, education level, national and regional averages from the American Music Therapy Association and incorporates time for planning and documentation in addition to time spent with children in session. According to the American Music Therapy Association Workforce Analysis (2021), the average yearly salary for a music therapist in the Southeastern region was \$53,032. The mean, median, and mode of hourly rate for group music therapy in the southeastern region was \$86.13, \$90, and \$100, respectively. These averages are now two years old, and inflation and the economy have certainly impacted the cost of living. Furthermore, the program writer is not asking for any benefits for the MT-BC, and they have taken that into account when creating the budget. These averages are based solely on client-contact hours. However, client-contact hours do not include the extra time spent for documentation and planning. For example, 20 client-contact hours requires approximately 20 non-client-contact hours for planning, documentation, and other administrative duties such as attending meetings. In other words, the program proposal is for a full-time position. The music therapist in this position will bill for client-contact

hours, but the rates are set to consider the time spent on non-client-contact hours. In addition to the MT-BC credential, the music therapist who will implement this program is also a music educator, holds a Master of Music in music therapy graduate certificate in Diversity and Inclusion, and has already provided music therapy services to the Early Learning Center for an entire school year. These skills and experience alongside the services proposed warrant a rate of \$89 per hour in the first year and \$90 per hour in the second year (to reflect estimated 2% inflation).

Materials

The materials included in the budget are basic materials required to start a music therapy program. Cleaning supplies are required for infection and disease control protocols. Other materials assist with artistic and creative expression on the parts of the children and the therapist and to provide multiple means of representation through the use of age-appropriate visual aids and manipulatives (e.g., puppets). I have included a list of materials I will use in the new music therapy program in Table 7.

Table 7

Materials Budget Estimate for Semester 1

Material:	Quantity/Exact Item:	Price:	Link:	
Colored Pencils	Crayola Classpack Kids' Colored Pencils, Assorted Colors, 240/Carton (68-8024)	\$46.79 (plus tax)	https://www.staples.com/Crayola-Classpack-Colored-Pencils-240-Box/product_424772	
Felt shapes	Felt Shapes	\$21.59 (plus tax)	https://www.staples.com/Royalco-Felt-Shape-Assorted/product_871549	

Felt board and felt animals	CHEFAN 4 Sets Storyboard and Foldable Felt Board Bundle	\$36.99 (plus tax)	https://www.amazon.com/CHEFAN-Storyboard-Foldable-Board-Bundle/dp/B0BWK72RVV	
Monster Puppets	The Puppet Company Baby Monster Hand Puppets	\$89.96 (plus tax)	https://www.westmusic.com/kids-movement/movement-props/puppets-stuffed-animals/540369	
Set of scarves	2 West Music WM27S 27" Hemmed Scarves (12 scarves)	\$67.90 (plus tax)	https://www.westmusic.com/kids-movement/movement-props/scarves/540053	
Cart (to transport instruments from room to room)	West Music 3-Tiered Cart	\$275.00 (plus tax)	https://www.westmusic.com/classroom-furniture-equipment/classroom-carts-storage/500967	
Storage bins (big)	WYT Clear Storage Latch Bins, 6-Pack Storage Organizer Box with Handle and Lids, 5-Litre	\$22.99 (plus tax)	https://www.amazon.com/WYT-Storage-6-Pack-Organizer-5-Litre/dp/B0BVQ69QJD/ref=sr_1_4?crd=3182ID5U1YKZX&keywords=storage+bins&nav_sdd=aps&qid=1682531896&refinements=p_n_material_two_browse-bin%3A11618101011&rnid=11618050011&s=storageorganization&sprefix=storag&sr=1-4	
Clorox Wipes	Clorox Commercial Solutions Disinfecting Wipes Refill, Fresh Scent Scent, 700 Wipes/Container (31547)	\$44.99 (plus tax)	https://www.staples.com/Clorox-Disinfecting-Wipes-Fresh-Scent-700-Wipes-Bucket/product_2073299	

TOTAL (without tax):				\$606.21
TOTAL (includes tax and shipping):				\$675

Musical Instruments

Quality musical instruments that are versatile and age-appropriate for the range of ages at the Early Learning Center are required to establish the music therapy program. These instruments provide rhythmic and melodic variety. Also, if the instruments are purchased by the center itself, then the Early Learning Center will be able to keep them should the music therapist seek employment elsewhere. Furthermore, these expenses will not be encountered each year. Instruments need to be repaired or replaced sometimes, but purchasing the instruments themselves is not an annual expense. I have included a list of music instruments, quantities, and prices in Table 8.

Table 8

Musical Instrument Budget Estimate for Semester 1

Instrument:	Quantity/Exact Item:	Price:	Link:
Buffalo Drum	Remo E1-1316-BE 16" Bahia Buffalo Drum Black Earth	\$99.95 (plus tax)	https://www.westmusic.com/drums-percussion/world-drums-percussion/frame-drums/203746

Lollipop Drum	10 Remo Kids Percussion ET-7110-00 10" Lollipop Drum	\$199.50 (plus tax)	https://www.westmusic.com/kids-movement/kids-drums/kids-frame-drums/200985
Set of Boomwhackers	Boomwhackers s 2 Octave Complete Set	\$115.60 (plus tax)	https://www.westmusic.com/drums-percussion/hand-mounted-percussion/boomwhackers/205400
Rhythm Sticks	30 Basic Beat BBS12 12" Combination Rhythm Sticks	\$148.50 (plus tax)	https://www.westmusic.com/drums-percussion/sticks-mallets/world-percussion-sticks-mallets/201357
Egg Shakers	60 Basic Beat BB201 Egg Shaker	\$117 (plus tax)	https://www.westmusic.com/drums-percussion/hand-mounted-percussion/shakers-rattles-guiros/202376
Djembe	Remo Mondo DJ-0014-32 14" Key-Tuned Djembe Green Kinte	\$429.95 (plus tax)	https://www.westmusic.com/drums-percussion/world-drums-percussion/djembes/203018
Small Djembe Set	2 Toca TFCDJ-7MS Freestyle Colorsound 7 Djembe Set	\$519.98 (plus tax)	https://www.westmusic.com/drums-percussion/world-drums-percussion/djembes/205218
Cabasa	3 Basic Beat BB07L Standard Cabasa	\$74.85 (plus tax)	https://www.westmusic.com/drums-percussion/hand-mounted-percussion/shakers-rattles-guiros/204346

Gathering Drum	Remo E3-5818-17 Gathering Drum	\$117.95 (plus tax)	https://www.westmusic.com/drums-percussion/world-drums-percussion/gathering-drums/202422
Bongos	2 Remo Kids Percussion KD-5400-01 Bongos	\$95.90 (plus tax)	https://www.westmusic.com/drums-percussion/world-drums-percussion/bongos/200333
Mini Rainmaker	6 Hohner Kids MP-200 Mini Rainmaker	\$83.94 (plus tax)	https://www.westmusic.com/kids-movement/kids-percussion/kids-sound-effects/201115
TOTAL (without tax):			\$2,003.12
TOTAL (with 10% preferred vendor ¹ discount):			\$1,802.81
TOTAL (with tax and shipping):			\$2,000

Note. 1. Preferred vendor is West Music

Program Evaluation

The MT-BC will evaluate the proposed music therapy program on the effectiveness to address the goals and objectives as identified by the teachers and music therapist and how the teachers perceive music therapy. At the beginning of the semester, teachers will be given a questionnaire that asks about their overall opinion of music therapy and previous experience with it and what their class's strengths and areas for opportunity are (see Appendix B). After seeing the students for approximately four sessions (two weeks) and after reading the questionnaires from the teachers, the music therapist will write three goals and three objectives to address over the course of the

semester. The music therapist will implement a data collection form that will be determined based on the goals and objectives and the specific classes.

At approximately halfway through the semester, teachers will fill out a mid-semester feedback survey that will be used to help guide the rest of the semester and to help gauge what is working and what is not working with the children (see Appendix C). The music therapist will also analyze the data collected thus far to evaluate the children's progress towards the goals and objectives. At the end of the semester, the music therapist will analyze the data in the same fashion, and they will issue the teachers an end-of-semester feedback form to gather their opinions on music therapy and its impact on the children's educational, social, and personal growth (see Appendix D). Based on funding source, feedback forms and data collection sheets may be submitted to funding agency as proof of program implementation. Information gathered from the forms may also influence the development of advocacy materials and professional development.

Appendix B: Classroom Teacher Pre-Music Therapy Questionnaire

Name (optional): _____

Date: _____

1.) Which class do you teach? Please include classroom name and age range.

2.) In your own words, describe music therapy.

3.) Do you have any previous experience with music therapy? If so, explain.

4.) Please describe the class's strengths

5.) Please describe the class's areas for opportunity (growth).

Appendix C: Mid-Semester Feedback Form

Name (optional): _____

Date: _____

1.) Which class do you teach? Please include classroom name and age range.

2.) What is your favorite thing about music therapy coming to your class?

3.) In what ways have the children benefitted from music therapy?

4.) What is one thing the music therapist should do differently with your class?

Appendix D: End-of-Semester Feedback Form

Name (optional): _____

Date: _____

1.) Which class do you teach? Please include classroom name and age range.

2.) Do you think your class has experienced emotional growth as a result of music therapy? If so, how?

3.) Do you think your class has experienced academic growth as a result of music therapy? If so, how?

4.) Do you think your class has experienced social growth as a result of music therapy? If so, how?

5.) Moving forward, how would you like to see music therapy used in the community of the center? Is there anything else you would like the music therapist to know?
(please use space on the back of the form)

Appendix E: Applying the Therapeutic Function of Music

Therapeutic Function of Music

Student information:

Setting: Early Learning Center at the Lexington Hearing and Speech Center

Population: preschool children ages 3–4 years old

Students: “The Parakeets” (ELC uses various animals as the classroom names)

Summary of Strengths: Majority of students are meeting CDC developmental guidelines across domains. Students are able to count to 5 and name objects and have no deficits in gross motor skills. Students are able to speak in complete sentences and follow multi-step directions.

Summary of Needs: One student (A) is autistic and does not engage in music group. He sits to the side of the group playing with his dinosaurs, occasionally looking at MT-BC and classroom teachers. Another student (LG) is also autistic and experiences periods of emotional dysregulation and inability to regulate. She will frequently cry out “No!” whenever she does not want to change to a different activity and begin screaming. Another student (Pi) is deaf and has binaural cochlear implants. She appears to have no difficulty with understanding spoken language, but her speech is slurred. Overall, several of the students display difficulties with impulse control but not out of the ordinary for their age.

Program Goal Considerations: “Children with and without hearing loss or speech/language delays can benefit from our inclusive classroom settings. All classrooms and activities at the Early Learning Center feature language and

literacy enriched curriculum with small student to teacher ratios. The listening and spoken language based programs provide a superior educational foundation for all children” (<https://hscky.org/education/>).

Problem Statement:

Treatment Goal: Improve social-emotional skills

Objective: Students will engage in one partner activity during a session at least three times across the semester by December 12th.

Rationale: Social and emotional skills are needed to stay regulated and maintain an overall sense of well-being. If a student is unable to identify or label their emotions, then processing emotions will prove to be more difficult. According to Salgado (2015), “Social and emotional development impacts all learning domains and is the foundation for promoting and developing healthy and resilient individuals who are better prepared to learn in a school environment” (p. v).

Social and emotional skills are the foundation for success in the other domains and maintaining meaningful relationships (Salgado, 2015). Both neurotypical and neurodivergent preschoolers (ages 3–4 years old) are in the middle of developing skills related to emotional regulation and identification needed for appropriate social interactions in school and in their everyday environments.

Table 9

Therapeutic Function of Music Worksheet

Musical Element:	Theoretical Framework:	Purpose:	Explicit Description:
Timbre: “pattern of partials that are	Infants are drawn to certain timbres as	Certain timbres are better at engaging	Use the guitar to engage their attention

present in complex waveforms, and how those partials change over time” (Thompson, 2015b, p. 64); color of the tone	early as four days old (Hodges, 2018).	the students with the therapist and each other.	and promote active engagement or the buffalo drum before a steady beat is even established.
Rhythm: pattern of long and short beat variations	Being “in the same rhythm” as others is a way of being present with them and promotes healthier relationships (Borcson, 2017, p. 61).	Rhythm will help the students connect with their peers.	Use music that has a clear steady beat they can entrain to together as a group.
Pitch: frequency of the sound waves	Pitch helps identify vocal inflection which is needed to understand social communication (i.e. use of humor or sarcasm) (LaGasse, 2014).	Pitch helps students understand and express emotions.	Higher pitches will be used in music to represent high energy emotions, and lower pitches will be used to represent low energy emotions.
Tempo: speed of the beat of music	Tempo promotes improvement in adaptive behavior which is important for emotional regulation and social interactions (Day et al., 2009).	Quicker tempos may increase engagement in activities.	Moderate to quicker tempos (90-150bpm) will be used for most interventions. Slower tempos (60-90bpm) will be used for cool-down activities.
Melody: pitches ordered in a specific way	Beginning in infancy, children are sensitive to melodic contour and gravitate to speech prosody associated with their family (Thompson, 2015a).	Melody will help students express emotions, understand emotional content and figures of speech.	Melody with lots of quick changes will be used to indicate changing emotions. Static melody will be used for regulation.

Dynamics: variations in volume and tempo of music	Dynamics help students understand social aspects of communication, such as the emotions of people with whom they are communicating (Kirkland & Manning, 2011).	This element will help students comprehend emotional content from others during the session.	Louder dynamics will be used to represent high energy emotions. Softer dynamics will be used to represent lower energy emotions.
Lyrics: words of the song	Social Stories, which can be put to music, often provide explicit detail on social interactions and expected responses (Gullón-Rivera et al., 2019).	Lyrics give instructions for certain music activities.	Lyrics will be used in partner activities to give instructions on social interactions (i.e. “Swing your partner once or twice,” “Promenade two-by-two,” in <i>Barnyard Dance</i>)
Form: organization of musical phrases	Social Stories teach skills needed for social interaction such as reciprocal communication (Gullón-Rivera et al., 2019)	Form will let students know when it is their turn to speak/lead/sing.	Call-and-response songs will teach students about taking turns and listening to others.
Harmony: pitches arranged into a specific order that sounds at the same time as the melody	N/A	N/A	N/A
Style: Genre and cultural implications surrounding the music.	Student-preferred music increases engagement with both the music and each other. Using student-preferred music will lead to a more positive mood-state (Hanson-Abromeit, 2015).	Doing songs/activities that students enjoy increases engagement, sense of autonomy, and self-efficacy.	Students enjoy imaginative music games and movement activities. Students are more engaged with each other during these activities.

Theory-Based Synthesis of Music:

Music is able to guide students to better social-emotional skills, such as taking-turns and collaboration. This happens when the music therapist is informed on best practices for utilizing each element. As for the elements, appealing timbres should be used, such as guitar and buffalo drum. As soon as the students hear either one, they are quick to engage with the music therapist and each other. Rhythm is also important because certain rhythms make entrainment to the steady beat and each other easier. In addition, higher pitches and quickly changing melodies help students with identifying and expressing high energy emotions. Whereas lower pitches and more static melodies help with identifying lower energy and slowly changing/static emotions. Static melody can also help with emotional regulation. Louder dynamics will be used to represent high energy emotions, and softer dynamics will be used to represent low energy emotions.

Students enjoy imaginative music games and movement activities. Students are more engaged with each other during these activities. While engaged in such activities, call-and-response helps students learn social communication skills such as taking turns and reciprocal communication, and lyrics will be used to give instructions for such activities and various social interactions.

Non-Music-Based Strategies:

The first non-music-based strategy to consider is to have a safe space that is big enough for the students to gather in and move around. Clearing the space of cumbersome furniture and tripping hazards is important. Moreover, clearing the space of distractions (toys, markers, various art supplies) will be helpful because then students can focus on

engaging with each other and the music. Using student's names when giving instructions is also important because the student will feel more connected to the music therapist. Also, it is important to demonstrate the skills on which the students are focusing. Modeling emotional expression and social skills, such as de-escalation strategies (deep breathing, counting, identifying objects), taking turns, and labeling emotions, will help students be able to regulate themselves and work well with others.

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VITA

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PROFESSIONAL EXPERIENCE

Music Therapist, Board Certified- Independent Contractor <i>September 2023-Present</i>	Music Therapy Services of Central Kentucky
Music Therapist, Board Certified- Independent Contractor <i>April 2023-Present</i>	Edge Music Therapy
Graduate Teaching Assistant <i>August 2022-May 2023</i>	University of Kentucky
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SCHOLASTIC HONORS

Poster Presentation <i>2023</i>	American Music Therapy Association Southeastern Regional Conference
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Little Endowment Scholarship <i>2022-2023</i>	University of Kentucky
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