POQUETTE, KELLY A. Ph.D. The use of movement in virtual elementary music education. (2023) Directed by Dr. Tami J. Draves. 125 pp.

Virtual education has been present for some time but gained popularity over the past two years due to COVID-19. As a result, music educators needed to adjust their teaching for online delivery, resulting in various approaches to teaching students in a virtual environment (Hash, 2021). The purpose of this study was to learn how four K-5 virtual music educators included movement in their classes. While many researchers have focused on using movement in inperson learning situations (Alperson, 1995; Dutkiewicz, 2020; Juntunen & Hyvönen, 2004; van der Merwe, 2015), few have focused on using movement in virtual music education. By listening to the stories, thoughts, and experiences of music educators teaching music with movement in a virtual classroom, this study was designed to provide insight into how music teachers implemented and perceived the use of movement in virtual lessons.

The following questions guided the research: (a) What types of movement activities do virtual music educators use in their lessons? (b) How do virtual elementary music educators evaluate and assess movement activities? (c) What are the benefits of including movement in virtual elementary music lessons? and (d) What challenges are associated with including movement in virtual elementary music lessons?

In this instrumental case study, the research questions were addressed by collecting stories of four virtual elementary music educators. Two interviews were conducted with each participant; additional data were gathered through one focus group, lesson plans, and guided journal responses. Purposeful and snowball sampling were used to enroll participants and the criterion strategy was used to narrow participant selection to those who taught for a virtual school during the 2021-2022 school year (Creswell & Poth, 2017).

Five themes emerged from the data: types of movement, planning for movement instruction, challenges when including movement, embodied learning, and engaging students and their families. Based on the data, participants valued movement as a component of their lessons, yet faced challenges in successfully incorporating movement. Additionally, students faced different challenges than teachers regarding participation in movement activities during lessons. Teacher evaluation of movement activities took several forms, both synchronously and asynchronously. Finally, the resources teachers used to incorporate movement activities varied greatly. Suggestions for future research and practical application followed the findings.

THE USE OF MOVEMENT IN VIRTUAL ELEMENTARY MUSIC EDUCATION

by

Kelly A. Poquette

A Dissertation Submitted to the Faculty of The Graduate School at The University of North Carolina at Greensboro in Partial Fulfillment of the Requirements for the Degree Doctor of Philosophy

Greensboro

2023

Approved by

Dr. Tami J. Draves Committee Chair © 2023 Kelly A. Poquette

DEDICATION

To my family.

APPROVAL PAGE

This dissertation written by Kelly A. Poquette has been approved by the following committee of the Faculty of The Graduate School at The University of North Carolina at Greensboro.

Committee Chair

Committee Members

Dr. Tami J. Draves

Dr. Maribeth Yoder-White

Dr. Constance L. McKoy

Dr. Patricia Sink

Dr. Quinton Parker

February 21, 2023

Date of Acceptance by Committee

February 21, 2023

Date of Final Oral Examination

ACKNOWLEDGEMENTS

To Jonathan. You are my everything. You have been through this process and every day you helped me. Thank you for knowing when I needed a push, and when I needed someone to listen. Without you and your love, I would not be the person and educator I am today. I love you.

To my parents who are always there for me. Hearing you say "I am proud of you" and "You are amazing" brought tears to my eyes and gave me the drive to continue. Both of you value education and have supported me through decades of learning and life. I love you.

To Amanda, Dave, Kenyon, Cole, Callum, and all my family. Thank you for being a positive support network and for all the games. I love you.

Thank you to friends who understood and encouraged me, especially, Seth McKnight. Seth, you are dear friend. I am grateful for you helping me from the beginning and particularly our statistic study sessions on Friday afternoons.

To my advisor and dissertation committee. Tremendous thanks to my advisor Dr. Tami J. Draves for weekly check-ins, clarifying this process, and the making me a better writer with some laughs along the way. If not for a conversation with Dr. Maribeth Yoder-White in November 2019 at NCMEA, I would not be at this stage in my career. Thank you, Maribeth for being a mentor and friend. To my committee members Dr. Connie McKoy, Dr. Patti Sink, and Dr. Quinton Parker, thank you for agreeing to guide and question me on this journey. Each of you contribute to the educator I am today.

This project was supported in part by a Research Grant from the American Orff-Schulwerk Association. Funding of this research project does not imply endorsement of a specific method, philosophy, or approach by the American Orff-Schulwerk Association.

v

TABLE OF CONTENTS

LIST OF FIGURES	X
CHAPTER I: INTRODUCTION	1
Background of the Study	1
Need for the Study	5
Purpose Statement and Research Questions	6
CHAPTER II: LITERATURE REVIEW	7
Five Approaches in Elementary General Music	7
Dalcroze Eurhythmics	7
The Kodály Method	9
The Feierabend Association for Music Education (FAME)	10
Music Learning Theory	12
Orff-Schulwerk	13
Movement Instruction in the Approaches	
Dalcroze Eurhythmics	13
The Kodály Method	14
Music Learning Theory	15
Orff-Schulwerk	15
Feierabend Association for Music Education	16
Folk Dancing	17
Expressive Movement	19
Creative Movement/Improvisation	20
Benefits of Including Movement	
Early Childhood	23
Elementary	25
Higher Education	
Assessment of Movement	
Virtual Music Education	
Pre-March 2020	
Post-March 2020	29

Summary	
CHAPTER III: METHOD	
Introduction	
Researcher Statement	
Study Design	
Participants	
Participant Recruitment and Selection	
Participant Demographic and Education Information	
Relationship to Participants	
Procedures	
Data Collection	
Data Analysis	
Trustworthiness	40
Ethical considerations	41
Participant Profiles	
Joy	
Kendra	
Natalie	44
Olivia	
CHAPTER IV: FINDINGS	
Theme 1: Types of Movement	
Non-locomotor Movement	
Full-Body Movement	49
Hand Movements	
Body Percussion	
Instruments	
Locomotor Movement	60
Dances	60
Creative Movement	
Expressive Movement	
Theme 2: Planning for Movement Instruction	

Adapting From In-Person to Virtual	69
Lesson Planning	70
Resources – Curriculum and Supplemental Materials	71
Vocabulary	73
Props	75
Theme 3: Challenges When Including Movement	80
Student Challenges	80
Technology Challenges	83
Theme 4: Embodied Learning	84
Theme 5: Engaging Students and Their Families	86
Student Leadership	88
Family Engagement	91
Conclusion	94
CHAPTER V: RESEARCH QUESTIONS AND IMPLICATIONS	95
Research Questions	95
What Types of Movement Activities Do Virtual Music Educators Use in Their Lessons?	95
How do Virtual Elementary Music Educators Evaluate and Assess Movement Activities?	97
What are the Benefits of Including Movement in Virtual Elementary Music Lessons?	98
What Challenges are Associated with Including Movement in Virtual Elementary Music Lessons?	99
Summary	.101
Implications for Practice and Future Research	101
Professional Development for Inservice Teachers	.101
Educator Preparation Programs and Preservice Teachers	.103
Recommendations for Future Research	.104
REFERENCES	107
APPENDIX A: FIRST INTERVIEW QUESTIONS	119
APPENDIX B: SECOND INTERVIEW QUESTIONS	120
APPENDIX C: JOURNAL REFLECTION QUESTIONS	121
APPENDIX D: FOCUS GROUP QUESTIONS	122

APPENDIX E: SOCIAL MEDIA RECRUITMENT POST	123
APPENDIX F: RECRUITMENT EMAIL	124
APPENDIX G: IRB EXEMPTION	125

LIST OF FIGURES

Figure 1. Melodic Contour	Visuals	;1
---------------------------	---------	----

CHAPTER I: INTRODUCTION

Movement is an important component in the primary teaching and learning approaches in elementary general music, including Orff-Schulwerk, Music Learning Theory, Dalcroze Eurhythmics, and Kodaly (Johnson, 1993; Keetman, 1974). With the increase in elementary virtual learning, how and if one incorporates movement in this environment is an area of interest. In this study, I explored how practicing K-5 virtual elementary music educators used movement in their classes, how they evaluated movement activities, and the benefits and challenges of including movement. Movement included any kinesthetic bodily motion used during a lesson such as body percussion, folk dancing, and expressive movement.

While virtual education has been present for some time, this form of learning gained popularity over the past two years due to COVID-19 (Camlin & Lisboa, 2021). As a result, music educators adjusted their teaching for online delivery, and this adaptation varied (Hash, 2021). In this study, I investigated four music educators' use of movement in their virtual elementary music lessons.

Background of the Study

I was motivated to study movement in the virtual classroom by my transition from an inperson to a virtual elementary general music teacher. Beginning in the Fall of 2019, I taught for two schools in-person, and for the 2020-2021 school year, and remained entirely virtual at one school and taught in three ways, virtually, hybrid and in-person, at the second. Finally, for the 2021-2022 school year, I accepted a position as an elementary music educator at a newly-opened virtual school in my district.

While observing teachers who relied on online resources, like Chrome Music Lab and YouTube videos, for their virtual classes, I realized educators were unsure how to take the

lessons and resources they used during in-person teaching and adapt them to the virtual environment. However, I experienced success when including folk dancing, expressive movement, and creative movement to develop students' understanding of musical elements such as melody, rhythm, and form. Students' responses to the activities, their ability to dictate and create rhythms, and the positive feedback I received from students and their adults was the measurement of effective movement integration. This success made me want to learn how other virtual teachers incorporated movement into their lessons.

Translating in-person material to virtual classes challenged virtual elementary music educators as they designed lessons to meet the required curriculum standards that were developmentally appropriate and engaged students. Many movement activities used with inperson classes, such as folk dancing and moving with partners, were hard for educators to translate to virtual classes. When students learned virtually, they lacked proximal connections with classmates as they often were in a room alone and did not have others in their learning space who could be their partner for dancing and movement. To counteract this barrier, virtual educators needed to adapt activities and dances requiring partners so these could be successful solo activities.

Evaluating the movement activities virtual elementary music educators used could be challenging. Evaluation of student movement often included visual assessment; thus, students had to be visible, and cameras had to be on for this to occur successfully in synchronous classes. For various reasons, students might not have turned on their cameras. Activities focusing on music history and theory did not require cameras to be on for assessment purposes. It could have been easier for educators to focus on and assess music history and theory with a written exam.

However, emphasizing these two music areas, and excluding movement, would not align with general elementary music approaches.

The approaches used by general elementary music educators included movement as part of their process, both as an activity itself and as a means to learn musical concepts (Abril & Gault, 2016; Choksy et al., 2001; Keetman, 1974). The type of movement varied by approach and included folk dancing, movement to teach concepts, creative movement, and expressive movement. When students learned kinesthetically, they connected music vocabulary with their prior experiences (Metz, 1989). Providing students with meaningful movement experiences was fundamental to learning music in-person and virtually.

Virtual learning in the United States has been part of the education landscape since the 1990s but dramatically increased when school districts shifted to Emergency Remote Learning (ERL) in March 2020 due to the COVID-19 pandemic (Hodges et al., 2020; Singer, 2021). For this study, ERL began in March 2020 and continued through the Spring Semester 2021. Virtual Music Education (VME) has expanded beyond ERL, and was a broad category encompassing various ages and options for learning music virtually, from private lessons to whole-group instruction. Specifically, VME in this study refers to group synchronous and asynchronous music learning at the elementary level. Synchronous refers to lessons being held in real-time over a video communications platform, like Zoom, and asynchronous refers to lessons that are recorded or done outside of the real-time class.

Both ERL and virtual learning have a connected history with distance learning, dating back a century. (Clark, 2013). Distance learning, the precursor to virtual learning can be traced back to correspondence courses at Calvert School in Baltimore, Maryland (Barbour, 2011). As technology progressed, so did the delivery method for distance learning. Across the United

States from the 1920s through the 1990s, school districts expanded their delivery methods of distance learning. In the 1920s, Midwest school districts utilized paper packets and radio programming. One example was the Wisconsin School of the Air (WSA) from the Wisconsin Department of Public Instruction (Bianchi, 2002). For about 50 years, WSA provided courses spanning many subjects, including K-8 Music. The courses included teacher and student materials and continued beyond the advent of television. However, WSA folded in the mid-1970s when schools began to consolidate, and smaller schools utilizing these services were rare (Bianchi, 2002). Other options for distance learning included film, telephone, and television (Bramble, 1986; Howley & Harmon, 2000). When the internet became available, distance learning converted to computers for delivery.

The origins of online learning in the United States began in 1989 with the University of Phoenix (Kentor, 2015). This institution provided an example for other tertiary institutions, and online learning expanded. The growth of virtual learning at the tertiary level then trickled down to K-12 schools. Between 1994-1997 online high schools developed regionally and statewide in Utah, Massachusetts, and Florida (Darrow, 2010). As of the 2019-2020 school year, there were 691 virtual schools in the United States (National Center for Education Statistics, n.d.).

Part of the need for distance and online learning was to allow schools to offer students courses beyond their current capacity. For example, some schools were too small to have specialists in varied subjects, such as music and physical education, and by offering virtual courses, learners' needs could better be met. In 2001, one school district in rural Colorado faced an enrollment crisis and began offering virtual courses, resulting in K-12 enrollment increasing from 30 students to over one hundred in the first year. This school continues as Branson School Online a K-12 public school open to Colorado students (Branson School Online, 2019).

Physical education, a specialized teaching area like music, was a movement-based subject that was part of the virtual learning landscape (Daum & Buschner, 2018). Rhea (2011) wrote that physical education was part of virtual learning because districts lacked funds to hire qualified educators while experiencing pressures related to academic achievement and higher obesity rates. When students participated in physical education virtually, it allowed them to receive credit for classes they took outside of the school day, like martial arts. In addition, it provided a hospitable learning environment for insecure students (Rhea, 2011). Jackson (2015) also found that students selected virtual physical education courses to free up time for other courses, like advanced placement courses or music. Still, there was concern that students could falsify their physical activity logs. The reasons for virtual physical education similarly applied to virtual music education. Students who participated in private lessons or music ensembles outside the school day and those who were uncomfortable playing or singing in front of others could earn credits while learning virtually. At all levels of virtual instruction, teachers learned to structure virtual courses differently from in-person courses. This restructuring included VME, and with the growth of online K-5 schools, a greater need emerged to support students' learning and educators' teaching of music virtually.

Need for the Study

Researchers have investigated how choral, orchestral, and band classes adapted during ERL, including synchronous and asynchronous lessons (Daugvilaite, 2021; S.-J. Gibson, 2021; Hash, 2021). There is, however, no known research on virtual elementary educators' uses of movement before and during ERL. There is existing research regarding using movement in inperson music classes from age two through tertiary (Alperson, 1995; Dutkiewicz, 2020; Juntunen & Hyvönen, 2004; Sims, 1985; van der Merwe, 2015). However, there is scarce literature

addressing movement in the virtual elementary music classroom. In this study, I explored four elementary virtual music educators' experiences related to using movement in their lessons. The data provided insights into virtual elementary music educators' successes and challenges. The data also included the educators' suggestions to improve virtual music education. Additionally, participants shared specific movement activities used as part of their lessons. Findings of this study contributes to the growing body of literature about VME and virtual education.

Purpose Statement and Research Questions

The purpose of this study was to examine how elementary virtual music educators used movement in their lessons. The research questions were: (a) What types of movement activities do virtual music educators use in their lessons? (b) How do virtual elementary music educators evaluate and assess movement activities? (c) What are the benefits of including movement in virtual elementary music lessons? and (d) What challenges are associated with including movement in virtual elementary music lessons?

CHAPTER II: LITERATURE REVIEW

I have structured this literature review into three sections: approaches in elementary general music, movement, and virtual music learning. The review begins with a background on five approaches used in elementary general music. Then it transitions to how the approaches incorporated movement, the benefits of including movement, and movement assessment. In the second section, I explored virtual learning in general education and music education and concluded with a need for research on how virtual music educators used movement in their lessons. Some sources are older because they are written by the originators of the approaches.

Five Approaches in Elementary General Music

Dalcroze Eurhythmics, Orff-Schulwerk, Kodály, Music Learning Theory, and the Feierabend Association for Music Education curriculums of First Steps in Music and Conversational Solfege incorporated movement in their approach (Abril & Gault, 2016; Callen, 2012; Feierabend, 2001, 2006). These approaches included heuristic movements that helped individuals appreciate the music and aesthetic movements that contributed to understanding the beauty and emotion of the music. Instructional reasons for using movement in elementary music classes included expressing emotion, appreciating music, understanding forms of music, and comprehending musical concepts (Callen, 2012; Swanson, 1969).

Dalcroze Eurhythmics

Emile Jaques-Dalcroze taught from the early 1900s to his passing in 1950 (Butke et al., 2016; Farber & Parker, 1987). He developed the Dalcroze Eurhythmics approach in Switzerland and while designed for conservatory students, Dalcroze Eurhythmics expanded to encompass all ages (Butke et al., 2016). This approach was born from Jaques-Dalcroze noticing that Geneva Conservatory university students struggled with aural skills, including intervals, pitch

recognition, and tone duration. He noticed a focus on theory and the rules of music, which were part of a fragmented curriculum, and he believed the European conservatories failed to instill their students with expressivity; instead, they focused on mastering classical repertoire (Seitz, 2005). His solution was to ground music in bodily experiences (Juntunen & Hyvönen, 2004). He developed a method to use the body as an expressive instrument and believed the body should be the focus of music education where students would learn the concepts kinesthetically (Choksy et al., 2001; Dutkiewicz, 2020; Farber & Parker, 1987; Jacobi, 2016). Both music and movement used motor anacruses and Jaques-Dalcroze organized his approach around preparation (anacrusis), action (crusis), and reaction (metacrusis) (Seitz, 2005).

Jaques-Dalcroze began his work in Geneva, but when it did not gain traction there, he spread his teachings by presenting and lecturing throughout Europe and beyond (Dutkiewicz, 2020). The three tenets of Dalcroze Eurhythmics included solfege, eurhythmics, and improvisation (Johnson, 1993; Juntunen & Hyvönen, 2004). To acquire musical skills, individuals embodied the music (Frego, 2017). Students built a vocabulary of movement responses to music that began with natural movements, like walking, and expanded to other locomotor options, like gliding (Juntunen & Hyvönen, 2004; Urista, 2016). Movement qualities included shape, isolation, coordination, energy, speed, and style (Farber & Parker, 1987; Johnson, 1993). Having a common vocabulary allowed the teacher and student to share an understanding and for the teacher to provide correction and guidance to the student (Johnson, 1993). Through this vocabulary, Dalcroze Eurhythmics addressed concepts of space, time, energy, level, direction, and shape (Johnson, 1993; Juntunen & Hyvönen, 2004).

Dalcroze Eurhythmics included more individuals since it used the body as the instrument, whereas vocal and instrumental courses excluded individuals based on access to resources (Farber & Parker, 1987; Juntunen & Hyvönen, 2004; Seitz, 2005). Part of this inclusive education combined movement with singing to create a more comprehensive learning experience (Frego, 2017). This movement assisted instrumentalists and vocalists in performing rhythm when they engaged in focused rhythmic exercises (Seitz, 2005). Furthermore, in developing bodily awareness, the performer better understood the physicality of performing (Juntunen & Hyvönen, 2004).

The Kodály Method

The Kodály method originated in Hungary by Zoltán Kodály, who desired a uniform music education system that supported music literacy and learning of Hungarian musical heritage (Choksy, 1987). Kodály wove the practices of several components which included solfa from Italy and tonic solfa from England, Cheve's rhythm syllables, techniques from Jaques-Dalcroze, and Curwen-Glover hand signs, into a cohesive method (Choksy et al., 2001). The core principles of this method included beginning instruction at a young age to be most effective, relying on folk songs in students' native language, using the highest quality music, building on a foundation of singing, and recognizing that those who have linguistic abilities also have music capabilities. Kodály considered highest quality music to include folk songs, first Hungarian and from neighboring cultures. Also included were Western Classical music and music by modern Hungarian composers. As the Kodály Method expanded, quality music expanded to include music that meets culturally and genre specific criteria, which is more inclusive (Gault, 2016). He believed music was a primary subject of equal importance to language, math, and social studies (Choksy et al., 2001).

The work of Kodály and his collaborators gained recognition outside of Hungary and was adopted and adapted internationally, including in the United States. There were four primary

objectives of the Kodály method. The first was to develop music literacy in children, including using traditional music vocabulary to think, read, write, and create music. Second, educators used folk songs from students' cultures and beyond to support learning their heritage and to bring an understanding of other cultures to all students. Third, the method encouraged participation in performing ensembles to enrich students' lives. Finally, it brought an appreciation and accessibility to the masterworks and revered art music (Choksy et al., 2001).

Movement was a strategy used to teach musical concepts when engaging with the repertoire. In Hungary, educators included movement in music education from the primary level. Nursery school and kindergarten classes prepared children for the more formal dance steps. The Kodály method began with non-locomotor movement focusing on individual body parts. This early movement was less structured than traditional dance steps. The progression continued with locomotor movements, such as walking, jumping, and hopping, and body percussion, such as patting and clapping. Songs sung by the children, such as those used with play parties, were the accompaniment for these activities. (Choksy & Kodály, 1981). Play parties were gatherings for teenagers and adults from the mid-1800s to 1940 in rural United States (Spurgeon, 2005). Movement aligned with the repertoire was a natural extension of the play parties and other repertoire utilized in the Kodály method.

The Feierabend Association for Music Education (FAME)

In 2012, John M. Feierabend founded an approach shared through The Feierabend Association for Music Education (FAME) (The Feierabend Association for Music Education, 2022). This approach sought to develop children's musical potential, especially regarding expressive and in-tune singing, rhythmically moving to music, and listening sensitively to the expressive qualities of music (Feierabend, 2000b). To achieve these goals, Feierabend used

children's music he deemed as literature instead of more commercially created or temporal music (Feierabend, 2000b). The two curriculums included in FAME are First Steps in Music (FSIM) (Feierabend, 2002, 2006) and Conversational Solfege (Feierabend, 1996, 2000a, 2001).

Both curriculums had frameworks with available resources that educators could access when lesson planning. They allowed flexibility for teachers to include material not included in FAME publications. FSIM contained eight lesson plan components: pitch exploration, song fragments, simple songs, arioso (child-created tunes), songtales, movement exploration, movement for form and expression, and movement with the beat (Feierabend, 2006). Conversational Solfege (2001) included four stages, readiness, conversational solfege, reading, and writing. The last three stages included learning through the rote process, decoding familiar and unfamiliar material, and conversational solfege and writing stages included a creating step (Feierabend, 2001).

The Feierabend approach followed the mantra that students should be tuneful, beatful, and artful, and movement is used for the beatful and artful elements (The Feierabend Association for Music Education, 2022). Three of the previous eight FSIM lesson plan components connected with movement: movement exploration, movement for form and expression, and movement with the beat. The Conversational Solfege curriculum employed movement in the readiness step by using songs and activities that included the unit's rhythmic and melodic concepts. Educators could use the same material for both curriculums and, in doing so, introduce readiness material for Conversational Solfege in kindergarten and first grade and review it in later grades.

Music Learning Theory

Music Learning Theory (MLT), founded by Edwin Gordon, was grounded in audiation, which is the process by which the brain connects meaning to musical sounds (Abril & Gault, 2016; Taggart, 2016). Gordon outlined steps of preparatory audiation which is typically associated with early elementary grades. Once students were prepared, they progressed to discrimination and then inference learning with the goal of becoming lifelong music makers and learners (Taggart, 2016). Children used audition to grow their musical understanding and engagement in music making. In MLT, the premise is that all students have musical capabilities they grow these abilities by using their voice and with body movement (Taggart, 2016). One way to include movement in a lesson was to have students use locomotor and arm movements to demonstrate the beat and tempo of a song (Taggart, 2016).

To encourage students to develop their audiation skills, MLT teachers created environments conducive to learning, and their lessons included listening, singing and chanting, audiation, reading, and writing. Songs in major and minor tonalities and various modes helped students develop music vocabulary (Lange, 2013). As a result, of these vocabularies, students could identify and create rhythmic and melodic patterns that they can combine into a larger composition.

Gordon considered flow a requirement for audiating rhythms because students needed it for sustained movement (Gordon, 2012). He wrote about the connection of flow with the four Laban effort elements in relation to rhythm. The four elements, time, space, weight, and flow, each interacted differently with rhythms. Flow and movement furthered the learning through audiation, which was fundamental to MLT.

Orff-Schulwerk

The Orff-Schulwerk approach, established by Carl Orff and Gunild Keetman placed the child as the center of learning and music-making (Hartmann, 2021). The origins of this approach were in the work of Orff and Dorothee Günther at the Günther-Schule in Münich, Germany (Carl-Orff-Stiftung, n.d.). The Orff-Schulwerk approach catapulted to a national and international platform in 1948 when Orff led children in 14 radio performances titled Das Orff-Schulwerk (Hartmann, 2021). Professional organizations worldwide forwarded this approach, including in the United States, where the mantra of "Sing, say, dance, play" encapsulates the core beliefs of the American Orff-Schulwerk Association (AOSA) (American Orff-Schulwerk Association, 2023). This approach scaffolded learning, which enables students to build on their prior knowledge and incorporate speech, movement, and music (Andrews, 1982).

A primer text for Orff-Schulwerk teachers was Keetman's book, *Elementaria: First* acquaintance with Orff-Schulwerk (1974). In this text, Keetman included rationale and specific examples for including movement in lessons in this text. She described the process for the teacher to lead students from improvisatory movement created from the children's imagination to an established musical form. Keetman espoused that movement training should begin early, and educators should give students who are reluctant to move a choice to watch and process anxiety while receiving encouragement to participate in the activities (Keetman, 1974).

Movement Instruction in the Approaches

Dalcroze Eurhythmics

Dalcroze Eurhythmics incorporated many musical elements, such as rhythm, meter, tempo, phrasing, and dynamics (Seitz, 2005). Jaques-Dalcroze and Montoliu believed children should learn rhythm first through aural and kinesthetic means, followed by notation (Becknell,

1970; Jacobi, 2016; Jaques-Dalcroze, 1972; Juntunen & Hyvönen, 2004; Urista, 2016). To reinforce this belief, Montoliu used two categories of instruction, music and rhythmic movement (Jacobi, 2016). Dalcroze Eurhythmics educators utilized the inherent rhythm of the body to lead students from arryhthmia to errhythmia, or individual movements to connected movements (Seitz, 2005). Both sound and silence were part of the Dalcroze Eurhythmics approach. Students developed inner hearing when utilizing silence, which could aid in their actualization of pitch, tempo, and rhythm (Frego, 2017). When creating bodily orchestrations, movement was valued as well as rest, immobility, and silence (Seitz, 2005).

Marla Butke and David Frego, founders of the American Eurhythmics Society (AES), created a resource for teaching this approach. In *Meaningful Movement* (2016), Butke and Frego provided lessons based on four different skill levels and anchored them in the musical concepts of rhythm, expression, melody, harmony, texture, tone color, and form. Teachers could use these concrete plans to integrate Dalcroze Eurhythmics principles without formal training.

The Kodály Method

The Kodály method incorporated varied movement activities, which also included singing. Examples would be starting with a nursery song like "Row the Boat," progressing to circle and line games like "Ring Around the Rosy," and continuing to traditional folk dances. Games accompanying folk and composed songs often included movement and were traditionally accompanied by singing only (Choksy et al., 2001). While the Kodály method focused on singing, these games could reinforce concepts and are the reason children sing the songs as opposed to using a recording (Choksy, 1987). In upper elementary grades, teachers incorporated movement by including conducting, which was intended to reinforce time signatures, meter, and beat divisions (Choksy et al., 2001).

Included in the Kodály method were specific concepts such as tempo, weight, and flow through both non-locomotor and locomotor moving at primary levels. Singing games provided the structure to incorporate these non-locomotor and locomotor skills. The games ranged in difficulty, and students typically performed them in a circle or line formation (Choksy & Kodály, 1981). To extend students' learning, they created movements matching the piece's form while they sang or listened to the piece of music (Gault, 2016).

Music Learning Theory

Gordon supported learning rhythm through body movement, and his approach led students to learn first through audiation and movement and then through notation (Lange, 2013). During the stages of preparatory audiation, developed by Gordon (2012), children moved and vocalized as they progressed in their music learning. When deciding how to model movement for young children, Gordon based his approach on the work of Laban (1988) and Weikart (2003). Gordon focused on Weikart's sequential approach to movement and dance, which centered on students progressing from egocentric, or self-focused, movements to imitation. This progression guided students to move past egocentricity. He also included Laban efforts based on awareness of time, weight, space, and flow. For educators to properly model movement for students, they needed to be comfortable with the four categories of the Laban efforts. Incorporating these Laban efforts helped students to be successful with full-body movement. The goal was to coordinate breath, movement, and music-making so students could take part in music making (Reynolds, 2005).

Orff-Schulwerk

Carl Orff identified elemental concepts like rhythmic patterns, form, and tempo to develop the Orff-Schulwerk approach, which included movement (Beegle & Bond, 2016). Some

examples were using body percussion to enhance rhythmic learning, moving to the tempo of music, and reflecting dynamics in movement (Andrews, 1982). Body percussion also provided the foundation for playing instruments.

Keetman (1974) described many different ways to include both locomotor and nonlocomotor to teach concepts like meter and tempo. Some specific walking examples included curved lines, straight lines, forward and backward, changing direction, in step with rhythm, with text, sideways, with clapping and small percussion, gestures and singing, and with a recorder. There were additional directions regarding how to perform and vary the different locomotor movements of running, hopping, skipping, bouncing, jumping, galloping, and swaying. Educators used these movements when processing pieces with and without instruments.

Educators who used the Orff-Schulwerk approach taught rhythmic motives or ostinatos through speech, movement, and body percussion (Beegle & Bond, 2016). Once students demonstrated speaking and moving patterns, they could transfer this knowledge to instruments. This process was successful with elementary classroom instruments, including those traditionally associated with Orff-Schulwerk, such as the recorder, barred instruments, and unpitched percussion instruments.

Feierabend Association for Music Education

The Feierabend Association for Music Education curriculums of FSIM and Conversational Solfege utilized movement as a core element when teaching concepts. Throughout this method, teachers incorporated movement such as structured dance, creative and expressive movement, body percussion, playing games where students stood when they recognized a pattern, and the Curwen-Glover hand signs for melodic pitches and patterns (Feierabend, 2001). Materials from FSIM utilized fingerplays, action songs, beat keeping, and

circle games to address the components of movement for form and expression, and movement to the beat (Feierabend, 2006).

To prepare and reinforce the rhythmic and melodic reading components of the Conversational Solfege curriculum, students engaged in activities like play parties and dances, which introduced or reinforced the rhythms and melodies of focus for each unit (Feierabend, 2001). The repertoire selected for these activities has merit in its own right, but in this instance, they supported rhythmic and melodic learning. Educators also taught each unit's rhythmic and melodic patterns using movement (Feierabend, 1996, 2000a, 2001).

These approaches shared the goal of developing students' musical skills and focused on similar concepts in movement instruction, such as tempo, form, and rhythm. Specific movement activities were fundamental to several of these approaches, such as folk dancing, expressive movement, and creative movement. The following sections address these different types of movement.

Folk Dancing

Folk dancing and square dancing were activities in several of the approaches to elementary music instruction. Simple traditional folk dance steps were part of Hungarian primary music classes and increased in difficulty as students aged (Choksy & Kodály, 1981). When possible, some schools in Hungary included folk dance classes and national dances like the Czárdás (Choksy & Kodály, 1981). Traditional Eurocentric folk dancing in the colonial United States, some of which led to square dancing, had its roots in material from France and England (Choksy, 1987). As square dancing grew in popularity in the United States, enslaved Africans increasingly provided the music and called the dances for White audiences (Blakemore, 2017).

Popular and accepted dances underwent several iterations, including play-party games involving unaccompanied singing and non-dance movements (Choksy & Kodály, 1981).

The Kodály method incorporates movement through play parties which provided entertainment with music but avoided dancing, which conservative religious beliefs prohibited. Both play-parties and square dancing contained choreographed steps, but square dancing included instruments, whereas play parties were performed without instruments and used singing games and clapping (Choksy & Kodály, 1981). Play-parties and folk dancing were movement activities included in modern elementary music classes.

FAME has strong ties to the Kodály method and, therefore, incorporated folk dancing into their curriculums. An example is *The Book of Song Dances* (2014), a resource that provided music and movement direction for songs in various formations. Those formations included single and double circles, longways, and four couple squares. A single circle had all students in one circle, where a double circle is two concentric circles. Longways formations consisted of partners facing each other in two lines. Finally, square dancing used four couple squares with four pairs of partners forming a square shape.

The Conversational Solfege curriculum included folk dances that supported the unit learning objectives (Feierabend, 2001). An example would be the song "Heel and Toe" for unit two, which was comprised of dotted quarter notes and triplets in 6/8 time (Feierabend, 2001, p. 125). The educator would sing the song, teach the dance, and return to the song in later lessons for the students to decode the rhythm. Using songs to introduce rhythmic and melodic elements prepared students to comprehend and decode the concepts connected with each unit.

Folk dancing and play parties in the Orff-Schulwerk approach included domestic and international dances and music for teaching form and other essential musical elements (Andrews, 1982). The Orff-Schulwerk approach included the traditional play party structure as a starting point for students to move to the music (Andrews, 1982). In addition, AOSA Levels II and III curriculum included folk dancing as a core movement component (American Orff Schulwerk Association, 2013). This curriculum ensured that teachers received training regarding teaching and designing folk dances, which were a gateway to include music from different cultures and geographic locations. The variety of dances educators included in their lessons varied based on their knowledge and resources. Resources suggested by AOSA included folk dance collections by Sanna Longden, *Dances of the 7 Continents*, and *Favorite Folk Dance Music of Kids and Teachers* (2006; 2004), folk dances from the United States gathered by the *New England Dance Masters* (Davis et al., 1997, 2010), and a dance compilation by Phyllis S. Weikart (2003).

Expressive Movement

In Dalcroze Eurythmics, students connected to music and themselves when they responded through movement to the room's sound, which included improvised piano, recordings, or composed music (Farber & Parker, 1987; Juntunen & Hyvönen, 2004). Jaques-Dalcroze espoused the connection of music aesthetics and the body's natural rhythm created artistic emotions (Seitz, 2005). Dalcroze Eurythmics practitioners used Plastique animée to express music through movement. According to Butke and Frego (2016), plastique animée was an artistic and creative embodiment of music through individual or group movement. Plastique animée began as a teacher-driven process with shorter experiences and moved to student-driven longer experiences (Butke et al., 2016). During plastique animée, participants listened analytically to music and expressed the music with movement (Dutkiewicz, 2020). Also, Jaques-Dalcroze believed students should move uninhibitedly while connecting their kinesthetic movements and learning objectives (Urista, 2016).

Expressive movement in FSIM is used for exploring form and expression (Feierabend, 2006). FAME published two resources, *Move It*! (2003) And *Move It* 2! (2008), with examples of expressive movement with classical music. These materials reinforced phrasing and expressiveness when engaging with classical music.

In the Orff-Schulwerk approach, movement experiences centered around building vocabulary that enabled expressive movement. An example of this vocabulary would be the eight Laban efforts: slash, punch, press, wring, guide, float, flick, and dab (Laban & Ullmann, 1988). Each effort has weight, space, time, and energy, each with a different combination. Establishing the kinesthetic attributes of these efforts allowed educators and students to apply them to listening examples or created music to express the music through movement.

Expressing the feeling and emotions of music was commonplace in the Orff-Schulwerk approach. Lasko (2016) used a four-step process aligned with the Orff-Schulwerk approach to scaffold students' learning as they choreograph dances. These steps are imitation, further imitation and exploration, collaborative choreography – improvised and composed, and independent choreography – composition. Teachers guided students through the process, but students used their ideas to construct the movements. In doing this, the students incorporated their feelings into the movement.

Creative Movement/Improvisation

The Dalcroze Eurhythmics approach provided a wide berth for creative movement and interpretation as no single movement was required to express the music (Abramson, 1980; Juntunen & Hyvönen, 2004). Instead, students improvised their movement in response to what they heard (Juntunen & Hyvönen, 2004). Since improvised movement was personal and unique to the individual, Jaques-Dalcroze accepted any expression of improvisation (Abramson, 1980).

This freedom of expression meant the teacher refrained from establishing preconceived ideas and allowed the students to discover the music through their movements, void of imitation (Abramson, 1980). Four principles of the Dalcroze Eurhythmics approach helped students move from learner to leader: self-realization, excitation/inhibition, regularization, and music and listening (Abramson, 1980). The students could work collaboratively with and influence the teacher when they moved through the four stages (Abramson, 1980).

Students improvised mostly in groups where they could learn from their peers and be both leaders and followers (Frego, 2017). They could transfer that learning to music performance when they developed skills to express themselves through movement and improvisation (Urista, 2016). Group improvisation supported students in growing their skills and developing the confidence to share their improvisational choices.

With the movement vocabulary learned through play-parties, games, and folk dancing in the Kodály Method, students become the movement creators. Students could develop dances and games to accompany songs they knew. The student became the leader using their experience and understanding of movement (Choksy & Kodály, 1981). They created movement based on the music in their languages and from their cultures (Gault, 2016).

Through the Orff-Schulwerk approach, educators guided students to gain self-awareness and realize their creative potential. Incorporating the teachings of Laban with a common vocabulary provided the structure for improvisatory movement. Students made musical decisions and problem-solved while improvising movements with concepts of space, time, and force (Laban & Ullmann, 1988). Educators could lead elemental learning through sound or have the students' movement guide the music (Andrews, 1982). Keetman (1974) provided direction regarding music accompaniment that reacted and inspired movement and included examples for recorder, pitched, and unpitched percussion.

Keetman (1974) described the free and improvisatory movement children created in reaction to some music.

We must try to preserve that which is intuitive and original, but at the same time help to bring that which may at first be formless and haphazard to a conscious form. For this purpose, music that gives an impulse to movement is a suitable medium. It should, particularly at first, be improvised by the teacher. (p. 163)

Improvisation was a starting point where students moved independently, progressed to working in pairs, and continued to include music with a specific form, like rondo (Keetman, 1974).

Silence and stillness were essential components that allowed students to move creatively to their internal rhythms. Moving in silence allowed for the focus of individual internal pulse and movement that was personally motivated, not teacher-led. Stillness also provided reflective moments to process the movements that happened and visualize the ones to come. The pause in movement also allowed students to take turns observing each other and imitating their peer's movements (Crabtree, 2017).

Movement exploration was one of eight components in the FSIM curriculum (Feierabend, 2006). Within this component were ten awareness themes centering around movement exploration, to be taught sequentially. From first to last, they were as follows: awareness of body parts and whole, awareness of time, awareness of space, awareness of levels, awareness of weight, awareness of locomotion, awareness of flow, awareness of shape, awareness of others, and ends with student-created movement (Feierabend & Kahan, 2004).

These activities could be done silently or accompanied by music (Feierabend & Kahan, 2004). In the Movement Exploration stage, students built skills and vocabulary transferable to other movement activities like finger plays, dances, action songs, and circle games (Feierabend, 2014, 2020; Feierabend & Kahan, 2004).

The various types of movement including folk dancing, expressive movement, and creative movement uniquely contributed to student learning. Folk dancing was more structured and formal. Expressive movement focused on musical concepts like dynamics and tempo. Creative movement provided the opportunity for students to synthesize the learning of the prior two types of movement and design original responses to music. Researchers investigated the benefits of including movement in music instruction, and they observed positive results across all levels of education. These benefits are discussed in the following section.

Benefits of Including Movement

The originators and practitioners of the five elementary general music approaches discussed here taught that movement is an important part of music instruction. The benefits of movement instruction include increased creativity, expression, and joyfulness (Dutkiewicz, 2020; van der Merwe, 2015). There has been little empirical research exploring those benefits. In the next section I present the few extant studies empirically investigating movement in music classes, with most of those focusing on students in early childhood and elementary settings.

Early Childhood

Several researchers have investigated music and movement instruction in very young children. Metz (1989) explored the movement of preschool children in response to music. The researcher observed the 2-, 3-, and 4-year-old participants during their centers time, which occurred twice a week. One of the centers was for movement to music. Students moved to the

music, and when describing their movements, they typically did not connect the movements to the qualities in the music. Students did demonstrate these musical qualities in their movement, providing a basis for introducing music vocabulary when it was developmentally appropriate. Teacher modeling and reinforcement encouraged participants to demonstrate the desired responses while students naturally expressed sound, silence, style, and tempo. Using the natural movements of preschool-age children could be an entry point to introducing musical concepts (Metz, 1989). In a study with similarly aged participants, Dutkiewicz (2020) researched how eurythmics in the curriculum in Polish preschools helped students with pitch, imagination, coordination, body consciousness, creativity, understanding of musical elements, and interaction with peer. With this base understanding, students and teachers could expand on these movement skills in later classes (Dutkiewicz, 2020).

Direct instruction with varied movement resulted in differences between students ages three through five in a childcare setting. When evaluating the varied movement of 22 threethrough five-year-olds at a university-affiliated research-oriented childcare, Sims (1985) noted types of movement, rhythmic movement, and reaction time using three different music examples. To record movement responses, the researchers used a Movement Observation Form (MOF) with four categories of movement: locomotor, axial, small motor, and no movement. They found subjects' responses were relatively evenly spread across the four categories. Five-year-olds used far more locomotor movement, and 3-year-olds demonstrated the most non-locomotor movements. Similarly, the four- and five-year-olds demonstrated more rhythmic movements than the three-year-olds. Sims (1985) explained these differences might have been because of the developmental difference between the younger and older participants.
Researchers have measured the effectiveness of music and movement programs based on growth in students' physical abilities. In researching the effect of music and movement versus physical education in the jumping and balancing scores of preschool-age children, Zachapoulou, Tsapakidou, and Derri (2004) found student scores to be significantly higher for those students who engaged in the music and movement program. This music and movement program was based on the Orff-Schulwerk approach and leaned on the work of Weikart (Weikart, 2003).

Elementary

Including movement could lead to a positive experience for both the student and teacher. Alperson (1995) recorded four classes and interviewed four Dalcroze Eurhythmics educators and their students. All lessons included a student-centered approach that was spontaneous and creative. Students' and teachers' perceptions of the classes were similar. Students commented that they viewed teacher observation as a caring behavior. Students and teachers viewed the lessons as opportunities to learn as a group regardless of ability level (Alperson, 1995). Frego (2017) found that combining movement and singing led to a more comprehensive music education. They also found that group learning strengthened students' improvisation skills as they lead and followed with movement. Rose (1995) found that kindergarten through second grade students showed statistically significant improvement in beat competency (p < .05) for those students who received Dalcroze instruction versus those who received traditional music instruction.

Educators evaluated the effectiveness of movement instruction from student-created graphic representations of music. Fortuna and Nijs (2020) used graphic representations of music to assess students' musical learning and the impact of using verbal or movement instruction. The researchers used a comparative study and pre- and post-test format to gather data. They also

included short answer questions for students to describe their work and a multiple-choice questionnaire covering background and demographics. All students heard the song four times, and while listening, one group described the piece verbally, and the other group used movement. Students in the movement group demonstrated more differentiation in their post-test drawings, which included more musical elements. Students' perspectives also shifted in that they moved from a first-person perspective to focusing on the sound of the music (Fortuna & Nijs, 2020). These graphic representations provided a physical artifact of their musical understanding.

Another form of physical expression of music was conducting gestures. In the children's choir setting, Liao and Davidson (2016) investigated the effect of gesture and gesture with movement training on intonation. Fifty-three fifth-grade students received instruction in one of three settings: no movement and gesture, gesture, and movement and gesture. The researchers evaluated students' intonation while singing five vocal patterns, which researchers selected from the twenty learned in instruction. The gesture and movement group students performed higher than did the other two groups on all five patterns. In addition, students who learned with gesture instruction had a significantly higher overall score than did those who learned with no gesture and movement (Liao & Davidson, 2016).

Higher Education

Van der Merwe (2015) shared that first-year undergraduate music education students at a South African university experienced positive outcomes of Dalcroze Eurhythmics instruction. Three cohorts of students received instruction from a licensed Dalcroze Eurhythmics teacher and a senior lecturer in music education. Five themes emerged as reflective of the students' experiences: social integration, joyful experience, bodily experience, easier understanding, and musical expression. Students shared that this way of learning led them to be better musicians,

more creative, and have joyful social interactions. "Easier understanding" described how students felt they improved their musical abilities through movement (van der Merwe, 2015, p. 395). "Joyful experiences" were associated with students actively participating in unique lessons, which required concentration and social connection (van der Merwe, 2015, p. 397).

Based on the limited research including movement positively contributed to student understanding and engagement at multiple ages of formal schooling. When movement was a lesson component, students understood musical concepts, were more engaged in learning, and connected with their peers. Exploring movement in virtual learning may help reveal the potential presence of these benefits in a different environment.

Assessment of Movement

Educators can use assessment to inform instruction and to communicate clearly with students and guardians about progress in movement and music learning (Cleland, 2009). Montoliu, an early practitioner of Dalcroze Eurythmics in the United States, believed educators could determine a child's musical understanding level by watching their bodily movement (Jacobi, 2016). Assessing growth in a Dalcroze Eurhythmics pedagogy was primarily based on observation and participation but also included written reflections and discussion. Selfassessment and peer assessments were valuable reflective tools (Juntunen & Eisenreich, 2019). Butke and Frego (2016) provided rubrics for evaluating focus, eurhythmics, expressive movement, and rhythmic solfège, which align with sample lessons included in the text (Butke et al., 2016). These rubrics provided a starting point for educators to quantify the effectiveness of Dalcroze Eurythmics activities (Juntunen & Eisenreich, 2019). As these researchers discovered, multiple ways exist to assess movement's effectiveness in music education. Additional research is needed to determine how virtual music educators evaluate movement activities. The five approaches discussed included movement, and while the studies were from inperson environments, they provided a basis for understanding the value of movement in lessons. Movement may be needed in virtual elementary music education in the same way that it is needed in-person. Because of the growth of virtual learning since ERL it is important to explore pedagogical strategies, such as movement, as they are adapted to virtual music lesson.

Virtual Music Education

Since the 1990s school districts, non-profit, and for-profit organizations have been implementing virtual education, sometimes called online learning (Singer, 2021). Virtual learning at all education levels is a growing field, especially due to the impact of COVID-19. The following section briefly examined virtual learning pre-ERL and how music education adapted during and after ERL. The demarcation of March 2020 indicates when ERL began for most of the United States.

Pre-March 2020

Prior to March 2020, music educators experimented with and implemented virtual learning with individuals and groups. Most of the empirical explorations of virtual music learning centered on one-to-one instruction. One example was a case study regarding a virtual private trumpet lesson (Dammers, 2009). While the virtual medium provided access to an instructor the student would not have had access to otherwise, the instructor felt they needed to adjust their teaching approach to compensate for latency and the lack of connection experienced with in-person eye contact. Both teacher and student experienced satisfactory connectivity using the Skype conferencing program, but there were times when volume levels needed adjusting, which slowed down the lesson pace (Dammers, 2009). A similar scenario was of one-to-one private conducting lessons over Skype in rural England. Participants had support setting up the

technology and learning how to use it successfully, which may have contributed to the success experienced in lessons (King et al., 2019). In these lessons, the researchers found that instructors spent more time listening and observing than accompanying students, likely due to the time delay. In an exploratory study involving students in England and Spain collaborating on composition projects, researchers found that learning in a virtual environment also created possibilities for international collaboration (Giráldez Hayes & Carabias Galindo, 2014). They observed that students could build relationships and improve their composition skills via an online platform (Giráldez Hayes & Carabias Galindo, 2014).

In 2005, Boston University created the first online Doctor of Musical Arts (DMA) program and used synchronous and asynchronous material to create a hybrid learning environment (Boston University, n.d.). Students pursued master's and doctoral degrees and professed that the coursework was more rigorous than in-person courses (Boston University, n.d.; Ruthmann & Hebert, 2012). Since then, multiple online master's programs in music education have emerged.

Whether at the programmatic level or through individual lessons and classes, music education delivered in the virtual environment has been an established mode of delivery (Dammers, 2009; Giráldez Hayes & Carabias Galindo, 2014; King et al., 2019). As learning platforms and internet connectivity improved and expanded, so has the growth of virtual learning. The United States education system demonstrated this growth during the shift in March 2020 in response to the COVID-19 pandemic.

Post-March 2020

The landscape of virtual learning encountered a dramatic shift in March 2020 with the emergence of COVID-19. However, there is a differentiation between the ERL situation created

by COVID-19 and virtual education (Hodges et al., 2020). The United States schools shifted to ERL in March 2020. The mode of instruction during ERL could not be compared to virtual education, where instructors had months to prepare for a course and had ample resources and support (Hodges et al., 2020). ERL may occur in the future due to possible weather or health emergencies, but the United States is presently beyond ERL circumstances.

Research regarding virtual music education from March 2020-present was mostly related to ERL. There was a lack of research on virtual music education post-ERL partially because of the time it takes for researchers to conduct studies and publish their findings. The following studies illustrated how music education adapted during ERL, which will have implications for virtual music education post-ERL.

When instruction pivoted to ERL in 2020, high school music teachers shifted how and what they taught their students (Hash, 2021). In one study, over 450 band directors from Illinois shared what material they taught during emergency remote learning. Several participants provided assignment choices for students focused on performing, listening, and music theory. To be inclusive of national standards, the author suggested including more creating and responding in future lessons (Hash, 2021).

Mercado (2021) conducted an instrumental case study with three undergraduate students enrolled in a Choral Music Methods course where they were creating asynchronous lessons. Students led an optional before-elementary school chorus, with half of the lessons in-person and the remainder asynchronous. In the data gathered from a focus group, individual interviews, lesson plans, and other sources, students highlighted several benefits of creating asynchronous online lessons. One participant shared appreciation for learning a new way to teach music that he might need in the future. Another participant included moving to the music as part of their

asynchronous lessons. Creating asynchronous lessons also led participants to create more detailed lesson plans. There were struggles related to technology access, home life challenges due to COVID-19, and increased time needed for creating the asynchronous lessons compared to in-person lessons. To better prepare preservice teachers, creating asynchronous lessons could be part of the pre-service music teachers' experience (Mercado, 2021).

The change to a virtual format for private piano lessons came with benefits and disadvantages, according to parents, students, and teachers (Daugvilaite, 2021). In this study, teacher-student relationships existed before the transition to virtual learning due to COVID-19. Participants shared more positives than negatives regarding their online learning experience; most negatives were related to technical issues. They described that students developed more independence and confidence, for example finding notes on the piano without the teachers' physical assistance. While some grew in independence, other parents and students missed the teacher's physical presence (Daugvilaite, 2021).

Gibson (2021) described challenges faced by instructors from the Ethno World Hope sessions, which began in response to the COVID-19 restrictions during ERL. In the format of online instruction, done via Facebook Live, leaders of the sessions focused more on the process and not the product, which was the reverse of how they approached in-person sessions. Leaders also developed technical skills to teach online, which were time-consuming. Finally, since instructors recorded sessions, less repetition was necessary as participants could rewatch portions if desired (S.-J. Gibson, 2021).

Virtual music learning opened new avenues for learning. Students were taught by instructors they would not have had access to in-person, and they grew in their independence and confidence. Global communities came together to learn through live events and asynchronous

recordings. Virtual music educators could learn from these examples and continue to expand on these educational offerings.

Summary

This chapter included research regarding movement and virtual learning but lacked the inclusion of movement in virtual elementary music education. At this time, researchers have not investigated movement in virtual elementary music education. This study addresses this deficit. Virtual music education is a permanent part of the education field and for it to be successful, researchers need to address the many aspects of this unique type of teaching and learning. School districts across the United States included virtual learning days as part of their delivery options for emergency conditions (*Remote Instruction in Emergency Conditions FAQ*, 2022). Whether teaching for a virtual school or being an in-person educator providing instruction on virtual learning days, music educators need to be equipped with the skills and resources to teach in the virtual environment.

CHAPTER III: METHOD

Introduction

The purpose of this study was to examine how elementary virtual music educators use movement in their lessons. While many researchers have focused on using movement in inperson learning situations (Alperson, 1995; Dutkiewicz, 2020; Juntunen & Hyvönen, 2004; Sims, 1985; van der Merwe, 2015), few have focused on the use of movement in virtual music education. By listening to the stories, thoughts, and experiences of educators teaching music with movement in a virtual elementary classroom, this study may provide insight into how music teachers use and perceive movement within a virtual classroom. The following questions guided the study: (a) What types of movement activities do virtual music educators use in their lessons? (b) How do virtual elementary music educators evaluate and assess movement activities? (c) What are the benefits of including movement in virtual elementary music lessons? and (d) What challenges are associated with including movement in virtual elementary music lessons?

Researcher Statement

I have been a music educator for 18 years. I taught elementary music for 15 years and began teaching elementary general music in a virtual setting in March 2020. My credentials encompass extensive Orff-Schulwerk training, including Master Certification. In addition, I have certification in First Steps in Music and Conversational Solfege Levels I and II through the Feierabend Association for Music Education (FAME) and have attended several workshops in Dalcroze Eurhythmics. I am also an active member of the American Orff Schulwerk Association (AOSA), Dalcroze Society of America (DSA), American Eurythmics Society (AES), Organization of American Kodaly Educators (OAKE), National Association for Music Education (NAfME), and the Feierabend Association for Music Education (FAME). I presented workshops at conferences about folk dancing and Laban efforts within music education. Also, I created the North Carolina virtual music educator professional learning community to support fellow virtual music educators.

I witnessed the effectiveness of including movement in my virtual elementary music classroom and believe movement is vital. Students in virtual learning were more sedentary than those in in-person learning. Therefore, I incorporated movement in every lesson including folk dancing, moving with Laban efforts, using body percussion, and singing and moving with solfege. My students exhibited their understanding of rhythm and solfege through movement, and I frequently assessed them visually with some written or oral reflections. I also saw students' vocabulary and self-efficacy regarding movement improve as they learned the terms associated with the Laban efforts and folk dances. They selected which movements they felt were best to respond to music and verbally and in writing articulated their choice. Parents and guardians told me that they appreciated how I designed lessons so their students could move as they learned.

By acknowledging these biases and positionalities, I reflected on how my experiences and assumptions may have impacted my understanding and the analysis process. I relied on participants' words and experiences expressed in their interviews and artifacts. The four participants in this study expressed varied perceptions concerning the inclusion of movement in their virtual classrooms. I endeavored to practice reflexivity throughout the research process and included all perspectives, not just those that resonated with my personal beliefs (Creswell & Poth, 2018).

Study Design

In this instrumental case study, I explored the experiences of four virtual elementary music educators. An instrumental case study focuses on an issue, problem, or concern using one

bound case (Stake, 1995). The issue addressed in this study was the use of movement in virtual elementary music teaching. This study was bound by participants and time, that is, virtual elementary music educators who taught virtually during the 2021-2022 school year (Creswell & Poth, 2018).

Researchers utilizing the case study method use many different forms of data, such as interviews, lesson plans, and participant reflections (Creswell & Poth, 2018). I conducted two interviews (See Appendix A and B) with each participant. Participants shared two lesson plans and responded to three written journal reflection prompts (See Appendix C). After completing all interviews and collecting lesson plans and journal prompts, I conducted a focus group with the participants (See Appendix D).

Participants

Participant Recruitment and Selection

Virtual education was not locationally limited, like in-person schools, therefore participants were recruited for their virtual teaching experience, not based on location. Participants came from two states: Missouri and North Carolina. Due to the unique nature of the participation criteria, I used purposeful sampling to enroll participants, including snowball or chain and criterion sampling. Enrolling participants with the snowball or chain strategies allowed individuals to recommend their colleagues who teach in similar circumstances. Lastly, due to the limited population from which to draw, I established no criteria beyond them being virtual elementary music educators in the 2021-2021 school year.

I used multiple approaches to find and enroll participants. First, I used Facebook, Twitter, and Instagram social media platforms to connect with active virtual elementary music educators (See Appendix E). Also, I utilized email and Facebook Messenger to send correspondence directly to potential participants (see Appendix F). The contacts for these direct email messages came from colleague-suggested participants and information gathered from online postings. The colleague-suggested participants joined the study due to an announcement that I made at the Central Carolina Chapter of American Orff-Schulwerk workshop on August 13, 2022. At the end of the workshop, I shared basic information about the study, including the criteria and the \$250 honorarium provided by an AOSA research grant. Then, I asked the attendees to contact me if they or someone they knew fit the criteria.

When an individual contacted me indicating their interest in the study I first asked if the individual taught virtually for the 2021-2022 school year. If they answered yes, I sent them a Google Form to complete to confirm they fit the criteria. Seven individuals completed the form and I eliminated two potential participants as they did not meet the criteria.

Participant Demographic and Education Information

I began data collection with five participants. After the first round of interviews, one of the participants discontinued participation. Three of the four participants self-identified as White females and one identified as a bi-racial, Black and Asian, female. All participants had over ten years of teaching experience, but their music specializations varied. Two participants were in their first year of teaching at the elementary level when they began teaching virtual elementary music; one came from a choral background, and the other was from a band background. The other two participants were elementary music teachers who continued at this level when they transitioned to virtual teaching. Two of the participants split their time teaching for a virtual and in-person school, and two participants taught full-time for a virtual school.

The prior training and education of the participants influenced on how they included movement in their lessons. Three had experience with Orff-Schulwerk through district

professional development and AOSA Chapter workshops and one of the three had some AOSA levels training. One participant with some Orff-Schulwerk experience also had an understanding of MLT from her undergraduate education. One participant had no experience with elementary approaches beyond her undergraduate program. Two participants were members of the National Association for Music Education (NAfME) and the other two were members of the American Orff Schulwerk Association (AOSA).

Relationship to Participants

Of the four participants, I had email communication with one participant before starting this study. This participant was a member of the North Carolina virtual music educator professional learning community that I created in Fall 2021. We corresponded via email, and I shared recordings and notes from the meetings as she unable to attend. I had not interacted with the other participants prior to this study. Participant profiles are included at the end of this chapter.

Procedures

Data Collection

Data collection took place over one month during August and September 2022. The primary data sources were two semi-structured interviews completed by each participant. Each semi-structured interview had a minimum of ten predetermined questions, and I included additional follow-up questions based on participant responses. The questions focused on how participants planned and implemented movement in their lessons and on outcomes of those lessons. Several questions requested participants to provide lesson material examples. Other topics included the benefits and challenges that participants encountered while teaching virtually and how they assessed the effectiveness of movement activities. At the conclusion of each

interview, I provided participants the opportunity to add any information they found relevant about which I did not ask explicitly.

After participants completed the second interview, they emailed two lessons that included movement components in virtual elementary music situations. A preliminary review of the interviews and lesson plan data informed the written journal reflection prompts to answer the research questions thoroughly. For example, I wanted the participants to expound on how they used creative movement in their lessons and crafted a question around this topic. I then wrote and emailed a Word document with three written journal reflection questions to each participant (Appendix C).

Each participant emailed a Word document with responses to the journaling questions, and all four engaged in the final data source, the focus group. Finding an agreeable time for all participants to attend the focus group was challenging within this study. I used two rounds of Google forms and individual emails with some participants to see if they could adapt their schedules. The focus group used a structured interview format with eleven questions (Appendix D). I elected to include a focus group as a data source with the objective of participant interaction stirring recollection and new information (Creswell & Poth, 2018). This outcome happened several times when the participants would add to the thought of another or offer an answer that came to them while listening to another participant. Participants shared throughout the focus group how they were going to take the ideas of their peers and use them in their future classes.

All interviews and the focus group took place through Zoom. The interviews were 30-70 minutes long, and the focus group was 60 minutes. Before analyzing interviews and the focus group, I cleaned all transcripts of filler words (e.g., um, ah, you know?) and removed errors. The initial transcriptions came from Zoom, except for one interview transcript that Zoom did not

record. For this one interview transcript, I used the voice-to-text feature in Microsoft Word to listen to the interview through headphones and speak simultaneously. The transcriptions of the interviews and focus group equaled 97 pages. After reconciling the audio with the written transcript, I began the analysis.

Data Analysis

After collecting data from each participant that included two interviews, two lesson plans, three written journal responses, and a focus group attended by all participants, I coded the data to find prevalent themes. I used the qualitative data analysis program HyperResearch version 4.5.4 and imported the data to code relevant statements. Coding captured the data's essence and led to emergent themes (Saldaña, 2021). When coding the interviews and focus group, I used structural codes, which represented the topics of a segment of data. I used descriptive codes for the lesson plans and journals, which provided an inventory of what participants included in these data (Saldaña, 2021). The codes came from the research questions and some examples included challenges, types of movement, and resources. Each of these codes contained subcodes; for example, the code of challenges, included student challenges and teacher challenges. A codebook containing 101 codes emerged from this process. I analyzed the data twice and combined redundant codes in the second round of coding. In this process, I coded statements related to movement, connected with the research questions, or that were what I considered unique information even if not related to the research questions. I combined the codes to create the following themes: (a) types of movement, (b) planning for movement instruction, (c) challenges when including movement, (d) embodied learning, and (e) engaging students and their families.

Data analysis occurred concurrently with data collection. The purpose of concurrent analysis was to inform the question asked in the second round of interviews, the focus group, and the three journal prompts (Saldaña, 2021). In addition, I kept a researcher journal with notes regarding each interview so that when I established the questions for each type of data, I could ensure all participants answered the same questions and that future questions covered different material than did prior questions.

Trustworthiness

Trustworthiness established the credibility and dependability of the data analysis. Typically, researchers should take two to three measures when addressing trustworthiness (Creswell & Poth, 2018). I selected triangulation, rich, thick description, and member checks. The different data sources allowed me to find codes that repeatedly emerged across data and confirm or disconfirm analysis. In this process, I was able to determine if participants' interview responses agreed with their statements in the focus group, the lesson plans, and their three journal prompt responses. Using triangulation of multiple data sources contributed to the study's internal validity (Creswell & Poth, 2018; Merriam & Tisdell, 2015).

I used rich, thick descriptions to accurately share the data, provide detailed examples, and promote reader transfer. Included in the findings were participant quotes that detailed first account examples and in the participants' words. One of the four philosophical assumptions in qualitative research is epistemology, which concerns how researchers justify claims of knowledge and one way to address this is to use participant quotes (Creswell & Poth, 2018). In addition, these descriptions allow readers to determine if they can transfer information to settings beyond this study (Creswell & Poth, 2018). The vignettes focused on the participants' backgrounds and experiences as a virtual elementary music educator. Using direct quotes placed

the focus on the participants and provided first-hand insight into their experiences (Creswell & Poth, 2018).

A final trustworthiness step involved member checks. I sent vignettes and a draft of Chapter 4 for them to review. (Creswell & Poth, 2018). I asked participants to make corrections and to ensure I correctly represented them and their perspectives. One participant did not respond to the messages asking for their feedback. Another participant responded to the vignette without requesting any changes. A third participant sent revisions for Chapter 4 and approved the vignette as written. The final participant requested that quotes were simplified to remove redundant and unnecessary words.

Ethical considerations

To address ethical considerations, I included several steps. First, to ensure there was no risk to participants, I submitted my dissertation proposal to the University of North Carolina – Greensboro's Institutional Review Board (IRB). The IRB exempted this study as they viewed it posed a minimal risk to participants (Appendix G). All participants were free to leave the study for any reason and at any point; this was the case for one individual who chose only to complete one interview. Since this individual only completed one interview, I eliminated them from the study. This choice to leave did not affect our relationship (Creswell & Poth, 2018).

The four participants who completed all required components received a \$250 honorarium from an AOSA research grant when I successfully defended and completed my dissertation. I informed participants that they would receive the honorarium after I completed these criteria and received the funds from AOSA.

I assigned pseudonyms for each participant to address confidentiality. Participants had the option to select their pseudonym. I stored all data using Box through the University of North

Carolina at Greensboro with a folder for each participant under the dissertation folder. All research began after I received an IRB exemption. Lastly, in addition to pseudonyms, any identifiers mentioned by participants were removed or altered.

Participant Profiles

Joy

Elementary music was new to Joy, much less virtual elementary music. Joy had been a high school choir director for the entirety of her fifteen-year career before her district moved her to the virtual school in her district. Teaching in a virtual environment was not her choice; her district placed her at the county virtual school after they cut her choir program. She did her best to create and teach lessons that engaged her students. She was successful in this endeavor because she received emails and feedback from students that they enjoyed learning music in her class!

Joy provided clear answers and gave specific examples during the interviews and focus group. Her answers were concise and direct, and she was forthright and honest about her experiences. Her face lit up when sharing success stories from her classroom.

Her transition from an in-person choir educator to a virtual elementary general music educator was a rocky path. She was moved to the virtual school in October after the school year had started. The district organized the virtual school hastily, and there was no specials schedule when she arrived. Joy's district required her to come into a school building two days a week and teach from that location. The building where she went was a former French immersion school that had closed in a prior school year. For the remaining three weekdays, she was able to work from home. Regardless of location, Zoom was the platform her district selected for synchronous classes. Her principal created the teaching schedule, and she had planning time in the morning while the classroom teachers taught, and then in the afternoon, the students would come to specials classes. Joy experienced overall poor attendance because specials classes occurred after the lunch break and the instruction for science, math, social studies, and English language arts occurred in the morning. For example, in a class that had an enrollment of 80 students, only 20 attended Music. She had three thirty-minute classes every afternoon and met with each class once per week. Students also had the opportunity to complete music lessons asynchronously. Joy created pages for each grade level in her district's learning management system to communicate with students. She was not required to submit grades for students, but her administration required her to provide multiple access points for music learning.

While Joy learned a great deal in the 2021-2022 school year as a full-time virtual elementary music educator, she did not continue in this role for during the following year. She moved to an in-person teaching position at the elementary level. With this being her second year at the elementary level, she will be able to transfer lessons she used during virtual teaching to her in-person classes.

Kendra

Elementary music has been Kendra's focus for the entirety of her teaching career, so when she transitioned to virtual teaching, she had years of experience from which to draw. Kendra's smile and ready laugh were evidence of the joy she experienced being a music educator. Kendra began her virtual teaching experience, like all four participants, during ERL beginning in March 2020. At that time, her administration began requiring paper packets and worksheets, and she progressed to teaching synchronously via Google Meet. The following

school year, she was fully synchronously virtual for about three-fourths of the school year. For the 2021-2022 school year, Kendra taught for two schools in her district: virtual and in-person.

To make her virtual school instruction successful, Kendra adjusted the material she taught during in-person lessons. For example, she would use body percussion and singing instead of instruments to learn rhythms and melodies. As a result, Kendra grounded her lessons in rhythm and beat. She did attempt to teach the recorder virtually but did not find that to be a successful endeavor! This adaptability gave her multiple examples for each interview question.

Unlike other virtual schools, which required a year commitment, Kendra's virtual school did not. Because of this fluctuating enrollment policy, she began the year with around 100 students, and 40 remained at the end of the school year. She taught combination classes with the grades grouped as follows: kindergarten and first, second and third, and fourth and fifth. She met synchronously with each class for 30 minutes each week. Due to attrition, she began with classes of about 20 students but ended the year with classes of 10. After a year of teaching virtually and in-person, her district chose to close its virtual school, and she has returned to teaching full-time in-person.

Natalie

Natalie was a veteran music teacher with over fifteen years of experience, a mother of two, and a self-described "pioneer" in virtual education. She was an earnest participant who began teaching virtual music as a band director but transitioned to elementary music and is most pleased with her choice. To find privacy for our interviews, she found a comfortable location in a rocking chair and, at times, had her kindergarten daughter and infant son came and joined our Zoom meetings. These visitors seemed apropos as she would often pilot material with her daughter to see if her students would enjoy the activities.

Natalie taught band for fifteen years. However, when she had her first child, she wanted a schedule change and chose to move from the middle school to the elementary level and has enjoyed her time as an elementary music teacher. She also learned that while she loved being a band member, she was less enthusiastic about being a band director. After teaching in a hybrid situation where two groups of students attended school on alternating days, Natalie also realized she would prefer to teach classes either in-person or virtually rather than teach both formats simultaneously.

To develop her skills as an elementary virtual music educator, Natalie sought professional development regarding both virtual learning and elementary music. She found her virtual elementary music educator role a "fun, challenging, and a really cool experience" (personal communication, August 22, 2022). Part of what contributes to her positive experience in the virtual environment is her small student body of about 150 students.

Natalie's virtual school, like many others, was created as a response to COVID-19 and received an overwhelmingly positive reception from the community. Year two of the school saw it shift to a magnet structure, which led to a lower school population but included electives in the schedule, which had been absent during the inaugural year. The classroom teachers developed an appreciation for specialists, like Natalie, during the year they did not have them as team members. In addition to Music, her school added Art and Physical Education as specials classes.

Natalie enjoyed a close collaborative environment with her colleagues and administration. Her school district is a flagship for the Microsoft Suite of products, and her school community all have access to her class links. This synergistic learning environment allows educators to move between classes and aid each other with attendance. Natalie's passion for music education and joy in virtual teaching was palpable in every interaction.

Natalie saw her students on a three-day rotation, and at different times of the year, one set of classes received extra asynchronous music classes. This schedule was not ideal as some classes received additional music content, and she had to plan synchronous classes knowing some students were further advanced than others. The following year, the administration altered the class schedule to one-week rotations, so specialists see one class for a week at a time. Of the four research participants, Natalie was the only participant continuing to teach at a virtual school for the 2022-2023 school year.

Olivia

Like Kendra, Olivia was an experienced elementary music educator. When her district began a virtual school, however, they had low enrollment and included the virtual classes as part of her teaching schedule along with her position at an in-person school. Olivia's principal was the administrator for her in-person and virtual school, making Olivia a natural choice for teaching some music classes virtually. In fact, Olivia requested that she be able to teach the virtual classes since she had more experience at the elementary level than many of her colleagues. Her objective was to allow beginning teachers to focus on their in-person classes and not have the added responsibility of virtual learners.

The aforementioned low enrollment also meant that there were combined classes for the special subjects, such as music. Olivia taught two sections of combined classes kindergarten and first, and second and third. Olivia was generous with her enthusiasm and smiles as she gave examples of her virtual teaching experience. For our meetings, she would sit at a table in her home, and occasionally one of her young children would come and sit on her lap. She was eager to share her experience as a virtual educator. Her emotions were evident through her facial reactions as she shared her answers and listened to others during our focus group.

Her specials schedule was a four-day rotation with 50-minute classes, using Zoom as the platform. Olivia's virtual school did not have synchronous specials for the first year, and district teachers created asynchronous lessons for the students. In the second year, administrators added synchronous music, art, library, and physical education classes since students missed face-to-face learning time with their specials teachers. Olivia returned to entirely in-person teaching in the fall of 2022 as her district continued the virtual school for middle and high levels, but not elementary.

CHAPTER IV: FINDINGS

Virtual elementary music educators discussed a multitude of ways they included movement in their lessons. Through interviews and journal entries, they retold their lived experiences as related to the research questions. The following themes emerged from analysis: (a) types of movement, (b) planning for movement instruction, (c) challenges when including movement, (d) embodied learning, and (e) engaging students and their families. The following section explores these themes.

Theme 1: Types of Movement

The first theme described what types of movement the four virtual elementary music educators included in their lessons. Movement was of two types: locomotor and non-locomotor. The different subsections of non-locomotor movement included full-body movement, hand movements, body percussion, and instruments. The locomotor section included dances, creative movement, and expressive movement.

Non-locomotor Movement

Participants commonly mentioned non-locomotor imitation of movements. Kendra was influenced by her experience with the Orff-Schulwerk approach in that she included mirroring in her lessons, a strategy taught in her Level I training. "Mirror me doing several different non-locomotor movements, and then finally choose their own movement to demonstrate the beat" were directions for her students (personal communication, September 12, 2022). All four participants shared how they used non-locomotor moving to teach steady beat, including using body percussion, found sounds, and creating patterns (personal communication, September 1, 2022, August 26, 2022)

Non-locomotor movement allowed students to move while remaining in a set location. Joy encouraged her students to "imagine that I can't hear the song at all, and I want you to show it to me with your movements." She directed them to show her "how loud or how soft" the music was (personal communication, August 12, 2022). Joy asked students to move their arms big or small or to stand up or sit down depending on the music dynamic differences (personal communication, August 24, 2022). Kendra directed her students as follows:

I would specify whether this was a movement that I want you to stay in your space, and we're going to you know plant our feet on the floor in this spot, and what movements can we do without leaving the spot. Versus you can move away from your spot and come back by the time the end of the you know the end of the music or the end of the phrase. (personal communication, September 1, 2022)

Natalie incorporated non-locomotor movement to demonstrate piano and forte by "crouching down low and reaching up high" or "stretching your arms out to like show arm movements to show soft and loud, using a scarf" (personal communication, August 26, 2022).

She also turned pitch identification into a game which she described as:

I played different pitches on the piano, high and low, and if it was low they had to get down on the floor. And then when I went to high pitches they had to jump up. They loved it! It's the easiest thing ever, I mean like ten minutes of class, and we did it multiple classes, and they were, just "Yes!" (personal communication, August 22, 2022)

Full-Body Movement

Natalie and Olivia used full-body non-locomotor movement when designing lessons. Olivia included non-locomotor moving in her lessons at the beginning of the school year, along with addressing how to demonstrate levels of low, middle and high movement (personal

communication, August 23, 2022). To facilitate moving for third through fifth grades, Natalie selected "Pizza, Pizza, Daddyo" and said, "These kids are obsessed with it. If that's all we did for twenty minutes, they would be happy because they get to pick the movement. I've had to floss, disco, dab, and all kinds of things." (personal communication, September 15, 2022). Also mentioned by Natalie was "The Canoe Song (My paddles clean and bright)" for beat keeping and the lullaby "Ho Ho Watanay," where they rocked their imaginary baby dolls to the beat (personal communication, August 26, 2022).

Kendra incorporated movement into her melody instruction more than the other three participants combined. She naturally found an intersection between form and melody and described it as follows:

It's definitely more form when you're analyzing the melody and asking why do the sections sound different? Well, one has higher sounds, one has lower sounds. Concepts overlap when you're teaching, but still being able to differentiate those different sounds in the melody, pairing them with different movements. The kids have a visual and a kinesthetic way of understand and connecting. (personal communication, August 23, 2022)

Kendra extended this skill of differentiating melodies and connected it with singing. When she connected movements to the different sections, it aided her students in recalling the lyrics. This allowed them "more accuracy and independence when they're singing" (personal communication, August 23, 2022). She would have the students include movement, explaining that "for high and low sounds and melody, I'm looking to see are your hands up high like, for when you hear high sounds. When it's low sounds, are you doing movements that are lower to

the ground" (personal communication, August 23, 2022). Kendra included melodic contour visuals for students to trace with their fingers, see Figure 1.

Figure 1. Melodic Contour Visuals



Note. The directions from Kendra are "Have students take their finger and follow each of the lines, vocalizing high and low sounds as they trace each line. The second time through, have students imagine they are on a roller coaster and have them vocalize "whoo's" as the move arms up and down as they ride each shape on the roller coaster" (personal communication, August 31, 2022).

One additional example from Kendra was using the book *Your Name is a Song* to incorporate movement with melodic composition. This was the process she followed:

Each of the kids created their song, with their name, and then they would add a movement to it to kind of follow the contour of how they were singing their name. First, we did it with our finger to follow the contour, and then some students kept it at their finger. But then, others might use their arms or and their whole body, or use their leg to

go up. But whatever it was, they would choose their movement to match the contour of their name song. (personal communication, September 1, 2022)

Participants also used children's literature with movement to reinforce the different voices and pitch. Kendra used the book Mortimer to reinforce pitch, "when we talk about high in low, and when he goes up the stairs, (stands and shows "climbing stairs") and when he goes down the stairs (Moves body down as she "climbs down the stairs.") (personal communication, September 1, 2022). Some children's literature was based on songs, or the text naturally fits existing tunes and reinforced different voices. To introduce singing, whispering, talking, and shouting voices, Natalie used Mr. Brown Can Moo! Can You?, and she would extend these voices to explore movement. She described this extension saying that "to practice the other three [whisper, talking, shouting] (she demonstrates) whispering 'move it low.' Then talking, 'Move it really loud' and we will jump up" (personal communication, August 26, 2022). The book My Aunt Came Back was a song set with illustrations and is part of the FSIM curriculum resources. Kendra and Olivia both used this book in their classes and Kendra shared, "we did all the movements that went with that song, and the students thought that was pretty funny, because we just fell to the ground at the end" (personal communication, September 1, 2022). Natalie included the book *Tempo Tiger* as an "interactive book to help practice and learn different tempos. We clapped the tempos in the book. Or you can choose other movements" (personal communication, August 23, 2022).

Kendra created her lesson around "Surprise Symphony," focusing on the surprise portion and reacting in a certain way when the dynamic was forte. She began the activity by explaining the music to her students as follows:

I'm going to play some music for you, and I want you to listen for the surprise. I do a really big movement, when it was a surprise, and they did the big movement with me. Then we jumped like we're jumping out to scare someone, and then we tossed the stuffed animal in the air when it was a surprise. It was with K-1, and for them, it's just like 'Oh! It's so exciting!' Then we talked about when it was loud and it was quiet, and then we tiptoed in our spot when it was the quiet part of the music, and then we tossed the stuffy in the air when it was the louder part. (personal communication, September 1, 2022)

Hand Movements

Hand movements were an accessible way for participants to confirm their students were listening to and engaged with the lesson because they could see students moving their hands and responding to the music. These hand movements were teacher-structured and student-created (personal communication, September 1, 2022). Kendra described some additional detail about hand movements she used in her class:

Sometimes we would have something more prescribed, maybe we learned a handclapping activity that went along with the song. I was checking to see, can you keep the beat as we do this hand clapping activity that is not a free movement thing, but more of an organized way to move. (personal communication, September 1, 2022)

Natalie described a finger-play song named "Five Fat Turkeys:"

We do "Five Fat Turkeys" [the song tells about how the turkeys] slept all night in the tree, and the cook came around. We used simple hand movements. They love that, and then you count down because one of the turkeys gets caught, and then there's no turkey, and we do the movements. (personal communication, August 22, 2022)

Using conducting gestures was a structured teacher-led activity chosen by two participants. Natalie included conducting as part of her lessons and viewed this activity as "a little more advanced." Some of the repertoire she selected for these conducting lessons came from her state's symphony, which performed concerts throughout the year for school districts across the state (personal communication, August 22, 2022, August 26, 2022). Since third graders were the level attending these performances, these were the classes in which she incorporated conducting (personal communication, August 22, 2022). Natalie also utilized YouTube videos where the presenter would "would speed up and slow down the tempo while they were conducting, and so they had to keep up with whether they were going Largo or whether they were going, Allegro or Moderato" (personal communication, August 22, 2022). Natalie shared specific goals and songs she used in her lessons:

Learn to conduct in 2/4 time signature. Practiced conducting at different tempos. Largo, Moderato, Allegro, Presto. Conduct with and without different pieces of music, using recordings from YouTube:

Largo: "The Swan" by Tchaikovsky

Moderato: "The Washington Post March" by Sousa

Allegro: "Sonata Allegro" by Kuhlau

Presto: "Sabre Dance" by Khachaturian (personal communication, August 23, 2022) Joy was also a proponent of teaching through conducting patterns and shared, "when I was first teaching it, we did a 3/4 pattern, and we started off really slow. Then in Quaver, the song is really fast, so we had to start speeding it up" (personal communication, August 24, 2022).

Connecting hand movements with song lyrics was a participant favorite. Natalie shared that she used the hand movements with the "Itsy Bitsy Spider" for her kindergarten, first, and

second-grade students (personal communication, August 22, 2022). Another well-known song used by Natalie was "Twinkle, Twinkle, Little Star." She explained that "We learned it in English, then we learned it in Spanish, and we did all the hand movements (personal communication, August 22, 2022). "La Gallina" continued Natalie's opportunity to incorporate Spanish repertoire. She shared in her first interview, "I did this for Hispanic heritage month. It's about the little hen with her chicks, and we have movements for all that, and she has to put her chicks to sleep, that was fun" (personal communication, August 22, 2022). Natalie also used many other simple songs like "The Wheels On The Bus" (personal communication, August 22, 2022). Finally, Olivia shared how she started her classes with a Hello Song and used sign language to match the lyrics (personal communication, August 23, 2022).

A specific hand sign used by all participants when teaching melody and pitch were the Curwen-Glover hand signs. Joy had extensive experience as a choral educator and brought the hand signs from the high school environment to her elementary teaching position (personal communication, September 15, 2022). Olivia shared that "the secondary teachers in choir expect that knowledge, so I teach it from first grade on, so that they know the hand signs, and if we're singing melody, we'll use them" (personal communication, August 17, 2022). Natalie found that the hand signs were needed in all teaching circumstances when she said, "We do the hand signs. I would do that virtually or not, because it helps them understand pitch and where it is" (personal communication, September 15, 2022). Lastly, Kendra shared how she would play games using hand signs; by doing this, her students would be "connecting high and low with the hand signs and the pitches " (personal communication, August 23, 2022).

Olivia and Kendra used solfege syllables and hand movements or the Curwen-Glover hand signs to demonstrate knowledge of the pitches. Olivia taught pitches by singing, reading, writing, and moving. She shared, "move the high and low melodic direction to it, trying to cover all bases" (personal communication, August 17, 2022). Kendra shared, "hand signs for so mi [Curwen-Glover hand signs]. Then, we play the games, So La Mi, with the hand signs and connecting, high and low with the hand signs and the pitches" (personal communication, August 23, 2022). The way the participants used hand signs was varied, but they all used the hand signs for students to better understand pitch and melody.

Body Percussion

Participants frequently tied body percussion to rhythmic learning in their virtual lessons. Natalie would begin with clapping as her first level of body percussion (personal communication, August 22, 2022). Pairing different levels of body percussion while verbally echoing the rhythmic patterns provided Olivia's students the opportunity to internalize the rhythms, and she felt it "just gives a deeper level of understanding" (personal communication, August 23, 2022). Joy encouraged her students by using body percussion movements visible through their camera. As a result, she "did a whole lot of shoulder stuff, ears, nose, and head" to evaluate if they were participating and following directions (personal communication, August 12, 2022). Natalie also incorporated body percussion, and she said her students would show the beat by "clapping or patting on different parts of your body. Tap your head with a steady beat. We did so much of that last year, just tap anything!" (personal communication, August 22, 2022).

While participants varied in how they taught rhythm, many included body percussion as an access point. Kendra shared that her students would learn rhythms through movement by "playing rhythms, using body, percussion like clapping, patting, and stomping" (personal communication, August 23, 2022). Another activity she would use was the game "poison

rhythm," where students would use body percussion to echo all rhythm patterns but the poison pattern. To keep things challenging, she would "mix up different levels of body percussion for that so it wasn't just the simple clapping." (personal communication, August 23, 2022). Olivia expected her students in second grade and older to use multiple levels of body percussion. As they progressed, they would use more complicated rhythm patterns (personal communication, August 17, 2022).

Kendra connected body percussion with rhythm and specific repertoire. She would take songs learned previously, for example, "1, 2, 3, 4, 5, Once I Caught A Fish Alive," and add ostinatos with varied rhythms (personal communication, August 23, 2022). She also used a song called "Ooey, Gooey Worms" to focus on sixteenth note rhythms. Kendra directed her students to use alternating patting when the sixteenth note rhythms occurred and guided them to understand that some body percussion choices were more successful for sixteenth notes (personal communication, September 1, 2022). Using body percussion provided equitable access for all students in her classes as opposed to using rhythmic instruments, which not all students could access (personal communication, August 23, 2022).

Kendra and Natalie incorporated body percussion with children's literature. Natalie created a lesson with the book *Giraffes Can't Dance*. Students used rhythm cards to create patterns, "example Ze-bra is two quarter notes," and they would clap the patterns (personal communication, August 23, 2022). In *Rap A Tap Tap: Here's Bojangles Think Of That!*, rhythm expressed through body percussion was the main focus. She shared that students would "find a different place on their body to do that rhythm each time we read 'rap a tap, think of that," which was a sentence that frequently occurred throughout the book (personal communication, September 1, 2022).

YouTube Videos combining rhythm and body percussion and concept-specific material helped the participants. For example, Kendra sought out popular songs with body percussion rhythmic accompaniment such as "Count On Me" by Bruno Mars and "We Don't Talk About Bruno" from the movie *Encanto*. She chose these songs because they guided the students and had body percussion symbols, explaining that "it has the signs, so when to clap and when to stomp" (personal communication, August 23, 2022). Natalie also used body percussion videos and shared, "I love those. We do tons of those. My kids probably have a love-hate relationship with them we do so much" (personal communication, August 22, 2022).

Natalie frequently used a "really great" YouTube channel named *Danny Go* for class starters (personal communication, August 22, 2022). Natalie also shared that the visuals were helpful to her students:

[The videos] tell them whether they should do their hand or their foot, or tap their head or whatever, and then they've got the notes right there in front of them. So they've got the visual. They're learning what the rhythm looks like, and they're applying it with their body. I've done body percussion with fifth graders, and they're like, 'Yes!'" (personal communication, August 22, 2022)

Natalie used body percussion through YouTube videos from *Elementary Groove Tracks* that included "all kinds of stuff on there, body percussion, you name it" and that the "videos were edited well" (personal communication, August 22, 2022, August 26, 2022).

Instruments

Playing any type of instrument, formal or found-sound, involved bodily movement. All four participants included instrument playing in their lessons and often adapted to the resources their students had readily available. This meant using found sounds involving everyday household objects. Joy described these instruments as "anything you can [access] that makes noises" and she asked students to "find whatever they could at home, whether it be a pencil pouch that may makes a zipper noise or, literally a pen that made a noise" (personal communication, August 12, 2022). Kendra embraced the challenge of not having formal instruments for her students, and shared:

It's really interesting when you don't have an instrument to rely on, and you're like, I really want to get something that sounds like a maraca. Or, I really want to make something sound like a guiro, or, sometimes, I would even pull out different instruments and say, "Let's think about how we could create similar sounds." You don't necessarily have this instrument at your house, but what can we do?" They might take a piece of paper and rub it on their leg, to try to recreate a lot of the sounds that we would typically use instruments for in our [in-person] classroom. (personal communication, August 23, 2022)

Natalie worked with her administration to purchase instruments for her students to use at home. She shared:

I can do everything virtually except for some Orff things, because not every kid has a xylophone. My principal ordered egg shakers, and I'm hoping that they will come in by our pick-up day [when students come] to get all their books and stuff. Every kid, K-2, will have egg shakers because they're cheap. For seventeen bucks you can get forty of them on Amazon. Every K-2 kid has an egg shaker and a scarf. (personal communication, August 22, 2022)

In addition to egg shakers, Natalie asked her students to use homemade instruments and pots and pans if they did not have a bucket to use for drumming. She wanted her students to have

equitable access to instruments and not be restricted because "their parents won't go buy them a bucket" (personal communication, August 22, 2022). Olivia encouraged her students to use "two pencils or two markers, or wooden spoons, or something that you could drum with" (personal communication, August 17, 2022). In the focus group conversation, Natalie expounded about bucket drumming by saying, "especially with the older ones, they love it. With the little ones, they love playing on a little bucket or drum too, even if we're just doing it with their hands. I'm basically improvising your hand drums at home" (personal communication, September 15, 2022).

Joy also included Quaver lessons, which helped her students identify and utilize found sounds or "anything that you can use to make musical sound. Anything you can shake, scrape or tap." Using videos with rhythm notation, students could see examples of other children playing found sound instruments. She guided her students through creating an aerophone with a straw and then selected a body percussion rhythmic composing lesson in the Quaver curriculum to transfer to this new instrument (personal communication, August 23, 2022).

Locomotor Movement

Including locomotor movement in beat-keeping activities was another way participants kept their students engaged. All four participants shared how they used locomotor moving through dances, creative movement and expressive movement. They used these different forms of movement to teach concepts, engage students, and to create a joyful learning environment.

Dances

Participants included a variety of dances that reinforced musical concepts like form, beat, and rhythm. One structured dance Olivia selected was the chicken dance. Another example was from Peter and Mary Alice Amidons, part of the New England Dancing Masters, with the lyrics,
"here we go, riding our ponies our ponies." Both of these songs are examples not involving a partner, which was beneficial when teaching in the virtual environment (personal communication, August 17, 2022). Joy would bring to her students' attention how "it [the music] got faster and how it got slower" when they were engaging with dances (personal communication, August 12, 2022). Also, Olivia used listening maps to help her students understand the ABA form and that "A has beat, B has no beat" (Olivia, personal communication, August 19, 2022b). Olivia provided a dance example that covered the concepts of beat and rhythm with "Seven Jumps" by the Shenanigans. She shared that this was an activity "all of those kids love. That was, you know, matching rhythm and beat with the music" (personal communication, August 17, 2022, August 23, 2022).

Olivia gave a specific ABA example of "Ersko Kolo" from *Teaching movement & dance:* A sequential approach to rhythmic movement (Weikart, 2003):

We did an A section with ice skating on your paper plates, and when it got to the more peppy rhythmical B section, we had a snowball fight. I have them make snowballs by crunching up paper and stuff, and throw it at their family, or their stuffed animals or something. So they were identifying the fast and slow sections. (personal communication, August 23, 2022)

When Kendra taught rondo form, she would incorporate movements created and led by students. She described it as follows:

We all came up with the movement for the A section as a class and then I broke students up into groups, and they had, one of the B, C, or D sections of the rondo, and then they had to come up with the movement that matched the music for their section of the rondo. Then we came back together as a whole group, and we saw each group's movement for their section of the rondo, and then we put it together as a whole class. (personal communication, September 15, 2022)

A gateway to structured dance was children's literature. In her first interview and lesson plan, Natalie mentioned the book *Giraffes Can't Dance* (Andreae & Parker-Rees, 2001). The book mentions several dances and she shared how she used this as a springboard to movement:

They talked about the different types of dances like tango and waltz, and the Cha Cha and these kids have no idea what this is, I'm pretty sure. I found some videos that are dance videos for kids. It's dance instructors teaching elementary students how to do a Cha Cha and how to do a waltz very simple. So they were able to learn a dance. They also got that Cha Cha is a fast dance. Waltz is typically much slower and lyrical, and so they were able to get tempo with that, even though that wasn't my main focus. (personal communication, August 22, 2022; The Moververse, 2020a, 2020b)

Creative Movement

Creative movement uses imagination and improvisation and is mainly student-led and they often incorporate musical concepts. Kendra sought student input when using the book *Tiptoe Joe* with her students (G. F. Gibson & Rankin, 2014). They would incorporate movement to match the story and have it be reflective of how the characters would move. She described this experience as follows:

If we're doing this book *Tiptoe Joe* and it's a deer nibbling a leaf, I'm expecting them to say that it's quiet and not loud, and I'm expecting them to make a movement that's not like "Whoa!" but more (demonstrates a small movement) something that's going to match the expectation of what the musical concept it implies. (personal communication, September 1, 2022)

Kendra and Joy described different ways they connected animal movements to help students understand timbre. Joy shared:

I did a lot with timbre, like the different types of voices connected them with an animal, especially with the littles. So an elephant has a different timbre than a frog. We pretend we're frogs. I did a lot of pretending of different animals, and talking about how they sound compared to other animals. (personal communication, August 24, 2022)

Kendra also connected animal movement to the varied instruments in "Peter and the Wolf." She described how she scaffolded the activity:

They would do movements for each of the animals when they heard that instrument playing. We did a guessing game after we listened to the piece and read the story. Then we had a guessing game where I would play the instrument, and then they'd have to move like the animal that was connected to that instrument in "Peter and the Wolf" and identify which instrument they hear. (personal communication, September 1, 2022)

For her fourth graders, Kendra focused on the instrument over animal sounds and created a charades-type game. She described the game as follows:

First, we start where you, pretend you're playing that instrument. Then we went to the next level. What was trickier was coming up with the movement that would make you think of that instrument. Making your movements match the characteristics or qualities of that instrument sound. (personal communication, September 1, 2022)

A classical music example came from Natalie, who used "Flight of The Bumblebee." She approached the song from multiple angles. She asked her students to "Show me what you feel, show me what you think. Sometimes they have scarfs, and sometimes they don't. But I'm like,

'what are you going to do?' and turn them loose. It's very fun to watch" (personal communication, August 22, 2022).

Creative movement included the dimension of imagination. For example, Olivia shared a lesson from a local Orff-Schulwerk workshop called "Imagination" and used it to coincide with Halloween. She described the game she played with kindergarten and first-grade students by saying:

We sing the song "Imagination, imagination. Imagine you are a witch." Then they would have to freeze in some kind of pose, and they could explain their choices, like I'm a witch, and I'm stirring my brew, or I'm a witch, and I'm casting a spell. Then I could see all of their different thoughts of how they were moving to express what they wanted to say without talking about it. (personal communication, August 17, 2022)

Natalie also used imagination when she guided her students to pretend to be animals, saying that "nothing makes a kid happier for the ages, two through like eight years old, than pretending to be an animal" (personal communication, September 15, 2022).

Building on the "Imagination" game mentioned in the prior paragraph, Olivia shared in her journal response how she applied this game to a book:

This activity also paired well with books like *The Lady with the Alligator Purse* that has a plethora of goofy nouns. Imagine you are a doctor, nurse, alligator purse, or even bathtub! Students could create their statue, and then we could talk about their artistic choices for making their statue the way they did. (personal communication, September 4, 2022)

Guided creative play through children's literature was another access point Natalie used for locomotor movement. Natalie used the book, *We're Going on a Bear Hunt* and the

accompanying song to act out the actions of going on a bear hunt and eventually running away when a bear appears (personal communication, August 22, 2022).

Expressive Movement

Participants used movement to teach expressive musical qualities such as tempo and dynamics. Kendra explained, "If we're talking about expressive elements in music, we would match their movement to the music. So if the music seemed very peaceful and flowing, they would do a movement that showed those musical characteristics" (personal communication, August 23, 2022). Kendra differentiated her instruction by providing movement and drawing options for her students to describe different musical elements. She shared in her first interview, "We created music, and you could either draw a picture or create a dance that went with your piece of music. But you would have to use all the elements that we discussed, to create a certain idea or mood" (personal communication, August 23, 2022).

Participants used varied repertoire when moving to expressive elements. This repertoire included classical music and folk songs. For example, Natalie learned an activity from a colleague called "Sunrise," which was a movement activity based on the song "Sprach Zarathustra" by Richard Strauss. She described the lesson as follows:

When they hear the music, they have to touch their toes, and when the music changes, they touch their hips, and then they touch their shoulders. Then when they hear the big crescendo, they touch their head, and they move their arms like they are playing the drums, and they're moving around with it. When you get to the drumming part, you would think they were in the orchestra playing timpani themselves. It's my favorite starter activity ever. (personal communication, September 15, 2022).

Olivia had a unique way of drawing her students into an activity with her tempo cube. She described it as a yellow foam cube with different tempos written on each of the six sides. She used this dice when teaching "Hickory Dickory Dock" to her first graders and also with older students with "The Noble Duke of York" (personal communication, August 19, 2022b). She explained that "The Noble Duke of York"

is supposed to be a long way set folk dance, I adapted the moves. Then we would roll the tempo cube, and they would say "Tempo cube! Tempo cube!" We would roll the dice and let it pick which speed we did. That was something that the second and third graders were mega into. They love the tempo cube. (personal communication, August 17, 2022)

Olivia and Kendra shared how they used specific repertoire for teaching the expressive element of dynamics. Oliva used "In the Hall of the Mountain King" by Edvard Grieg, "It's got that great crescendo throughout the entire piece. There's a little eight beat movement that you would start small for quieter, and then get the movements bigger as they got louder. I probably did that around Halloween time" (personal communication, August 17, 2022).

Student-created movements that aligned with musical tempos was another way to solidify understanding. For example, Kendra led her students to create "animal movement to be fast or slow, letting them choose how to move, then show it to the class, and then the class does it as well" (personal communication, September 15, 2022). In her lesson example, Kendra explained how she put this into practice:

This lesson was based on the fable *The Tortoise and the Hare*. A student would randomly select a piece of music and the teacher played the recording. The student then determined if the music was fast or slow. As the class listened to the excerpt of the piece, they moved their bodies to represent the tempo of the music. Some students chose to pantomime the

tortoise or the hare running the race, while others chose their own creative movement to match the tempo. (personal communication, September 12, 2022)

Natalie and Olivia, used expressive movement to solidify the concepts of high and low with melodic contour. Natalie used school supplied scarves to have the students demonstrate "does the melody go high does the melody go low." She found the scarves to be a useful tool and shared, "I think it's my favorite thing about scarves because you're getting such a good visual of melody, and they can move up and down and do the different zigzag with the melody, or choppy" (personal communication, August 22, 2022). Olivia also agreed that showing melodic contour through movement was successful even if technology latency was an issue. "Any kind of melodic contour things you can see it, and it wouldn't necessarily have to match perfectly in time" (personal communication, August 23, 2022).

Providing students structure disguised as play was one activity Kendra used to help her students understand dynamics. She described the activity of "Fairies and Giants" as follows:

The quiet music was for the fairies, and you'd have to move like a fairy and make really small and delicate movements. Then the giants, were these big, bold movements. Showing how kids would connect for particularly dynamics, what they would connect to their everyday world to help them understand that concept in music. If I'm making a quiet sound, I'm tapping with this small movement like the little fairies. Versus, if I'm trying to make a big sound I would move wider, bigger with more force, more sound for big giants. (personal communication, August 23, 2022)

Some non-locomotor activities transitioned into locomotor activities. Olivia extended the "Five Fat Turkeys" game:

Then we take it further, and they get to go around their room, and they're turkeys and I'm the cook. At the end, they freeze, and if they get caught they become a cook because I don't do "you're out [game]". If they get caught, they become a cook, and they have to help me hunt the turkeys, and so they have to watch... Everybody is participating. I really like those games where you're not out, you got caught and you get to do something different. They're singing, they're moving, and they're just having a great time! (personal communication, August 22, 2022)

Non-locomotor activities were mentioned far more frequently than locomotor movement, partially because the participants could see their students on the screen if they moved in one place. Natalie expected her students to be visible during the lesson. The parameters she set were "Making sure you stay in front of the screen. I don't care if you explore your space, but I need to see you. Don't go do your movement in the corner" (personal communication, August 26, 2022). Joy also shared that she directed her students to be visible, "making sure I could see them. I really didn't want them to sit down; I wanted them to stand up and move around because they're sitting down the whole time in the mornings with the [classroom] teachers" (personal communication, August 24, 2022).

Theme 2: Planning for Movement Instruction

Participants drew from varied resources to provide their students with music education inclusive of movement. Their goal was to have a successful, meaningful, and joyful learning experience for their students. This section revealed what materials they used, including technology resources, and how they adapted their instruction. Including movement allowed teachers to differentiate based on students' learning needs. Joy shared, "I made sure the kids had as much fun as they could, for the 30 minutes that I had" (personal communication, August 12, 2022).

Adapting From In-Person to Virtual

A unifying experience among the participants was the need to adjust prior lesson material to make it successful in the virtual environment. The resources varied from complete curriculums to individual songs. An example of a fully digital curriculum was the Quaver curriculum purchased by Joy's district. She found that it was "geared more towards in-person, but there are some things that you actually can do" in the virtual classroom (personal communication, August 12, 2022). Joy used the Quaver resource for both synchronous and asynchronous lessons and was the only participant to have this resource at her disposal.

More common than using a digital curriculum like Quaver was adapting songs and activities to work in the virtual environment. For example, Natalie adapted one activity, "Pass the Pumpkin" to her virtual lessons. When she used it for in-person classes, she would have her students sit in a circle and pass a stuffed pumpkin around to the song's beat. She adapted this activity by using their imagination. She asked her students to "pretend to have a pumpkin or a ball, and pass it" (personal communication, August 22, 2022). Olivia wrote in a journal response that "all activities that I could keep from in-person learning to virtual learning I kept. That would include anything that was individual movement, or things that were not with partners or in large groups" (personal communication, September 4, 2022).

Part of adapting activities and lessons included Exceptional Children (EC) or Adapted Curriculum (AC) classes, which required specialized instruction. Joy found that her EC students needed more movement to be successful, and she "did a lot more brain break stuff, a lot more like getting up and dancing and moving" (personal communication, August 12, 2022). Natalie's

virtual school had a large EC population, and she had several self-contained EC classes. She saw these self-contained classes twice a week and became very close with these students. The needs of these students varied from medical to emotional, and the virtual environment allowed the students to self-regulate without disrupting the class. She said this about her EC students learning in a virtual environment:

It's just a better environment for them, especially some of my autistic kids, because they don't have all the other outlying factors. If they get ever stimulated and have a meltdown, some of them are home with mom or dad, or with the babysitter. They can go calm down in a safe place and come right back and it's really good for them. We've had tons of kids that have medical issues and they can safely learn and be with the whole group. Then we have AIG kids too. But I think, as far as kids who have any kind of health issues or learning disabilities, or EC, it's phenomenal for them. (personal communication, August 22, 2022)

Lesson Planning

Natalie and Olivia shared how they structured their 50-minute classes to include movement. Natalie began her classes with movement "just to get the wiggles out and get them engaged quickly." She would also use similar activities if she completed her lesson with time to spare or if she needed to gather students' attention in the middle of her lesson (personal communication, August 22, 2022). Olivia shared more specifics about the core of her lesson. She set her students up for success by posting every morning in the Seesaw platform information about that days class and what resources the students would need (personal communication, August 17, 2022). She described her lessons as "multi-faceted," giving more detail when she said:

I would work through a concept. I also want to make sure that they're not sitting for too long, and that I'm changing activities frequently, because their attention spans are so short. For kindergarten and first grade, I would have a fifty-minute class, and I would

potentially have ten or twelve activities. (personal communication, August 17, 2022) Olivia included movement components in her lessons, having a "variety of sitting and standing" activities (personal communication, August 17, 2022).

Resources – Curriculum and Supplemental Materials

Participants utilized a wide variety of resources, including non-technology options. In the beginning months of virtual teaching, they used familiar resources while searching for new material that would be more effective in the virtual environment. Resources also varied depending on if they were district-supplied or from the participants' personal libraries.

District-supplied curriculums were helpful to several participants. Olivia found the *Game Plan* curriculum (Kriske & DeLelles, 2005, 2006, 2007, 2008, 2009, 2011) very useful and shared in her first interview (personal communication, August 17, 2022), "I'm a big fan of Game Plan." She also explained that she continued to use this curriculum and "if the activities weren't virtual friendly, I just adapted them" (personal communication, September 15, 2022). She shared a specific example of how she used a lesson from *Game Plan 3* without adapting:

In my second and third grade virtual class, we did the movements to "Down to the Baker's Shop" from *Game Plan 3*. There was nothing that needed to be changed for the virtual students to complete the activity; the only thing lacking was the community of performing the moves with the other students in-person. (personal communication, September 4, 2022)

Another example of a music material publication was *Music K-8*, and Olivia had this as an available resource (personal communication, August 17, 2022). In her lesson plan data, she shared an example:

There is a welcome song from *Music K-8* that has little moves in it, like "clap your hands" to the rhythm of ta-ti ta, I used this every K/1 class for the first thing we did. Some of the moves were in the verses, then there were some opportunities for kids to make their own moves. (personal communication, August 19, 2022b)

Olivia mentioned resources from Peter and Mary Alice Amidon. She shared how she used their material for "an easy movement, folk dance kind of song that you could do by yourself" (personal communication, August 17, 2022). Another dancing resource was *Teaching Movement & Dance: A Sequential Approach to Rhythmic Movement* and the accompanying CDs, *Rhythmically Moving* (Weikart, 2003), which Olivia used for the song "Ersko Kolo" (personal communication, August 23, 2022).

Professional development opportunities contributed to resources used by participants. Kendra shared that she gathered new material by "going to Orff workshops and getting ideas from different presenters" (personal communication, August 23, 2022). Olivia shared a resource she learned about from a session at an AOSA National Conference called "Move Your Body Fun Deck" and described it as follows:

These are great, and all kids love freeze dance, but they don't know how to move when they do a freeze dance. If we would end a couple of minutes early, we could use these cards. Some of them are non-locomotor like snow angels, and so they've got just all different movement. So like you have to look like this, but how can you find a way to move too. (personal communication, August 17, 2022)

Vocabulary

Having a common movement vocabulary between educator and student aided in clear communication. Two participants included explicit movement vocabulary in their lessons, and, in doing so, equipped their students for the lesson at hand and future learning. The vocabulary included a variety of non-locomotor and locomotor movements.

Movement vocabulary acquisition began at the kindergarten level with some participants. Olivia taught movement vocabulary in her second lesson of the year because "I knew that I would be using them throughout the year." The words she taught included "gallop, skip, hop, leap, slide, jump, slide, walk, and run" (personal communication, August 17, 2022, personal communication, August 23, 2022). She continued in her second interview by sharing the need for this explicit vocabulary instruction:

I would show them, explain it, then we would physically do them, and I would watch them do it. Those words you would assume that kids would know, but many of them don't. I feel like every year more and more things I think that they should know, they don't know. I want to make sure we're all on the same page in K-1 that if I use a word they know what it means. (personal communication, August 23, 2022)

Olivia described the photo of a music bulletin board she used as a visual for her music classes. She received this resource from her AOSA Level I movement teacher, containing movement vocabulary words. She described how she used it as follows:

I would screen-share it if I was trying to give kids inspiration for a move that they could do. They've seen those words, but I really only teach those core words that I said. Then if they see those and have other ideas, that's kind of a starting point for them, being creative with movement. (personal communication, August 23, 2022)

Teaching expressive movement vocabulary was how Kendra helped her students understand different kinesthetic options. She would first focus on how "certain movements, lend themselves to being slower and faster" (personal communication, August 23, 2022). Integrating descriptive language helped her connect movements to her students' prior knowledge. For one activity to "Adagio for Strings," she would direct her students by telling them, "you're floating in water or we're thinking about gum stuck to the bottom of your shoe, and you're lifting up your feet slowly" (personal communication, August 23, 2022). She observed that her students struggled to keep a slower tempo. She said:

They always wanted to rush through, so you really had to use a lot of adjectives about weight, feeling heavy, or things like that to really help them understand that concept. They could identify the music as slow, but to move their body slowly was another step. (personal communication, August 23, 2022)

One reason to include movement vocabulary in lessons was to keep the material fresh. Kendra shared that:

I was trying to get them to be a little bit more expansive with their movement because it gets kind of redundant, and they just move the same way. We talked about different levels, when we're moving, we can be up high, or we could be down low. (personal communication, September 1, 2022)

Another way Kendra expanded her students' vocabulary was by including the idea of weight connected with movement. She used this when teaching tempo and said in her second interview, "The weight is what shows whether it's slow or fast. If you have heavier movements, that's going to be your slower movements versus with a quicker movement when there's less weight with your movement" (personal communication, September 1, 2022). Another connection

Kendra made with the tempo was the movement's speed connected with the music's speed; she shared, "We talked about the size of the movements, whether you use smaller movements versus bigger movements, and how that connects with the music we hear" (personal communication, September 1, 2022). Teaching these ideas of weight and speed helped Kendra's students to "not be limited in this tiny box" (personal communication, September 1, 2022). These experiences enabled her student to understand how to use movement vocabulary and the associated motions, especially when they created movement.

Props

Every participant shared how they incorporated props in their lessons. An assortment of items were used as props. They added variety to the lessons; for some students, it helped their confidence as they explored movement with music. Joy described a prop as "anything in the house that they could use to move" (personal communication, September 15, 2022). Kendra had a similar idea when she said, "things around the house, their toys, stuff that they enjoy, but using it as a learning tool" (personal communication, September 15, 2022).

Participants often used objects easily accessible in their student's learning environments. For example, Joy asked students to use "markers and basically whatever they had with them, and whatever they had to have for their class they for their [homeroom] class. A lot of times, it was whatever they had next to them" (personal communication, August 12, 2022). Kendra seconded this idea when she shared, "We found a lot of things around the house that you could use, just random stuff" (personal communication, August 23, 2022). Kendra described it well when she said in the focus group, "When you took stuff that they like to play with, and used it for movement and music, it really helped engage them" (personal communication, September 15,

2022). Using everyday items that were easily accessible provided equity for the students, and there was no concern that students would forget a particular item for class.

Participants employed creativity when including props in their lessons, often using everyday household items for unique purposes. Kendra shared how she used a Kleenex for a Halloween activity:

One time we did this vocal exploration activity, and they had a Kleenex, and they put little dots on it to make it look like a ghost. Then we would go up and down with our voices, and you'd move your Kleenex. Move it up and down, and you would do melodic contours with your voice, and your ghosts would dance to the melodic contour. They just love that. (personal communication, September 15, 2022, August 23, 2022).

Kendra adapted a lesson from the *Game Plan Kindergarten* curriculum titled "It's So Good To See You" (Kriske & DeLelles, 2005, p. 1) so students could use props easily found in their homes. Kendra described the lesson:

Students found a prop in the house to use to move for 8 beats. Some chose props to move with like a scarf, or an object to toss in the air, while others chose props like stuffed animals to do the moving in place of them. Student volunteers showed the class, on the eight counts, their special way to move while the class sang the song. All students were asked to submit a video on SeeSaw of their special way they chose to move for me to assess. (personal communication, September 12, 2022)

She shared another example in her first interview regarding using pencils:

For one dance they would take their pencils, and it'd be like a click, click, as if we had castanets, the instrument. They would find different household things that we would use

to click, click. They would move up high, then move down low, or your pencils, and then move them fast move them slow. (personal communication, August 23, 2022)

Several participants used scarves as props for movement activities. Natalie's school had a pick-up day for students to come and receive supplies, so she ensured each student received a scarf with their supplies. She "took sheets of tulle, and cut it" and included these pieces of tulle in the supplies her students received (personal communication, August 22, 2022). Natalie shared that in her lessons "We often use scarves to show tempo, dynamics, and steady beat" and that she would use scarves, "more than I would normally in the [in-person] classroom, but it's just such a good way to get something in their hands. The scarf is popular, and they love it" (personal communication, September 15, 2022). She shared that "there's so much you can do with it" (personal communication, August 22, 2022, personal communication, September 7, 2022). Kendra would also ask her students to "find a scarf," and for her students, "sometimes, if kids didn't have a scarf, they would use a t-shirt or something instead of a scarf for movement" (personal communication, August 23, 2022). Olivia said in her first interview, "I didn't expect them to have the things that I have. So we did some things with scarves and I would tell them to use a paper towel, t-shirt, or dirty t-shirt off your floor" (personal communication, August 17, 2022). Natalie used scarves to teach several different concepts. As she describes below:

I found using scarves can get confusing if it gets louder and they go with up high. They confuse loud and high, those two concepts of pitch in dynamics, pitch and volume. So if we're using a scarf it's loud to make it bigger, it's soft to make it a bit smaller. (personal communication, August 22, 2022)

Participants varied how they used scarves in her lessons. Natalie described, "You get up, don't just stand there with your scarf, I want you to move. Get down low, get up high and move

around" (personal communication, August 22, 2022). When Olivia taught the song "Viennese Musical Clock," her students, "Label the form, then we did movement with scarves" (personal communication, August 19, 2022a). Kendra shared that her students loved to "throw things and then catch things," and scarves were a good fit for this type of activity (personal communication, September 15, 2022).

Another commonly mentioned prop was stuffed animals or stuffies. Natalie shared a touching story about how she used stuffed bears with the song "Rockabye Your Bear":

One of my boys his, I almost like cried in class. His daddy is deployed and my district has a huge military population. He had a stuffy, it was his dad. They had screen printed his dad on the cloth and stuffed it. It was a stuffy of his dad in his uniform, and he could hug his dad at night while his dad was deployed. That's what he brought to class, and I was almost sobbing in front of all the little children. I was pregnant, too, so the hormones were crazy enough. I was like 'that's so cute, I need a minute to gather myself, that is the sweetest thing I've ever seen.' So he did "Rockabye Your Bear" with his dad. It was the best. (personal communication, August 22, 2022)

Natalie added that she used stuffed animals with her kindergarten and first-grade students when she "had them bounce the steady beat, and you can bounce it high, and they loved that" (personal communication, September 15, 2022). Kendra also experienced positive benefits from using stuffed animals in her instruction. She shared:

With the younger kids, I begin by making their stuffed animal move, and then you gradually move it from the stuffed animal to doing it, to your own body. Just finding ways to get the kids excited about the movement, and then they'll start to feel more comfortable doing it. Then you can put in those activities that they may be more self-

conscious about. Once they get in the habit of moving, then it just kind of becomes part of what we do in the music, and so then they'll do it. (personal communication, September 1, 2022)

Another story Kendra shared involved one of her students with physical challenges:

I had one student who was wheelchair bound, and so he couldn't stand up and do a lot of movements. The idea that the Occupational Therapist gave me was, Whenever you're doing movements, let him have a stuffed animal and let the stuffed animal do the moving for him. Let him move this stuffed animal. So not that you can't do movement because you don't want to exclude him, do movement. So then to normalize that, I had all the kids bring a stuff to animal to do the movements in class, and they loved it! Some of the kids who might be reluctant about moving themselves, loved moving their stuffed animal, even up to third graders. They would love to bring their stuffed animal to class, too. (personal communication, September 15, 2022)

Other props included balls, plates, and cups. Kendra shared how her students might use a ball, "They might dribble, and they would toss the ball in the air and catch it, or do different things" (personal communication, September 1, 2022, August 22, 2022). In her second interview, Kendra shared a specific lesson where her students used a basketball, and this helped them feel more comfortable learning rhythms:

There was one music activity where we used a ball. It's a Black Eyed Peas song, (singing) "Let's get it started now, let's get it started in here." It's this whole thing where you dribble the quarter notes and sixteenth notes with the basketball. So the kids would find a ball, and almost everybody had some kind of ball that that they could use. They thought that was a really fun. I can assess you, and you feel more comfortable because it's more about making the ball bounce than it is about my body, and people looking at me, and thinking I look weird. Because if it's dancing, they tend to, shy away from it a little bit. If they're using their body to move, and they have a prop or tool, a lot of times that would make it easier. (personal communication, September 15, 2022; personal communication, September 1, 2022)

Olivia shared that she used paper plates for an ice skating activity (personal communication, August 17, 2022). In addition, Kendra used plastic cups for a lesson with her fourth and fifthgrade students and a YouTube video to accompany this lesson (personal communication, September 12, 2022). Finally, Natalie summed up the use of manipulatives with this statement during the focus group "I don't think it really matters what it is, as long as they can hold it, and they can manipulate it, they're happy with it" (personal communication, September 15, 2022).

Theme 3: Challenges When Including Movement

Participants faced various challenges encompassing all aspects of virtual learning. These challenges included not having learning spaces conducive to movement, students feeling self-conscious, and technology connectivity. These challenges were experienced by students, teachers, and even their family members.

Student Challenges

Some challenges facing students included communicating, physical limitations, and selfconfidence. Joy explained her frustration at not being able to communicate with her students because "they can't read, so it's not like I can send them messages on Canvas. I [would ask], 'Okay, did you bring your plates today' and they'd be like, 'What?' and I'd say, 'Oh well, it's okay, use your hands.'" (personal communication, August 12, 2022). Natalie communicated with parents to help students to come prepared for movement activities in class and found that while

"some of the parents are on it, and they'll do anything you ask them to" other parents did "disservice to their children because they're not willing to have the [requested supplies]. You've always got that parent who's not going to get the school supplies, and it's extra frustrating because I'm like 'you're in the house with them" (personal communication, September 15, 2022)

Students sometimes lack confidence and feel self-conscious learning and moving in a virtual environment. Kendra shared that her students "were very self-conscious about singing," and movement was her solution. Movement "helped them, to build more confidence in themselves." While singing was challenging for some, "Everybody would move. They just were a bit more confident with that" (personal communication, August 23, 2022). In the same interview, Kendra described that some students lacked physical dexterity. She thought, "Some of it was, I think, being at home for COVID, and not really doing a lot of things. You know, where you build those skills, the motor skills, and stuff" (personal communication, August 23, 2022).

The social difference in virtual learning also posed a challenge. Olivia shared that for some activities, it was difficult "not having partners and not being with a group." She added, "that community piece was definitely something that made it harder for kids" and "third graders would sometimes act like 'I'm too cool,' and they just sit down, which you wouldn't find in an in-person classroom, because you'd have the community of people that would do it together" (personal communication, August 17, 2022). Also connected to the social component was students being self-conscious about moving and being seen on a computer. Natalie articulated:

Some of my kids are just nervous to be on the computer screen, very timid about it, and they just didn't want to have a personal face up there. They were like, "I don't know if I really want to do that." I'm always encouraging the kids that "you're not doing it wrong,"

or that "you're not doing it as well as someone else." I'm not a dance teacher. I'm not going to grade you on that. I just want you to do the best you can. (personal communication, August 26, 2022)

Joy used positivity to counteract this self-conscious feeling and told her students, "I would always be like, okay, well whatever, just have fun do what you can, no big deal" (personal communication, August 12, 2022)

One concern mentioned by three participants was that students did not have the freedom or space conducive to learning, which their adults directly influenced. Students often did not want to move because they might disrupt their parents. Joy said that when she was doing a rhythm activity or something where they made a sound, a couple of students said, "my mom is sleeping in the back, or my dad's working, and I can't do this" (personal communication, August 12, 2022). In her second interview, Joy came back to this topic and stated that she "had to make sure that a lot of the procedures were making sure that no one else was around them" because "if you were going to be bugging your mom by being loud or moving around, then you couldn't really participate. You could actively listen. But you couldn't participate, really" (personal communication, August 24, 2022). Natalie described her concern:

The biggest thing that I would say is parents who've got their kids sitting at the kitchen table for my class, which is probably fine for math class or something. But in my class or PE, don't sit them at the table, put them in the living room or send them to their bedroom, so they have that space. That's probably the biggest thing hindering movement, it's the parents. (personal communication, August 26, 2022)

Natalie used her website to share "some ways to be successful in music class" to help her students' families understand that in Music, they will not "sit there and sing all day. That's so far

from the truth of what we actually do in music class" (personal communication, August 22, 2022).

Olivia had students, especially in third grade, who resisted movement because "they would sit and watch me do it, they didn't want to participate because maybe the space they were in they couldn't. Their brother was next to them doing math, and they would feel silly or distracting." Olivia shared that sometimes her students would be "on Zoom in their car going somewhere, so they're obviously not going to get up and move around. You'd see them strapped into their car seat, driving down the road, and they're on Zoom. So that was definitely a hindrance" (personal communication, August 17, 2022). All participants found upper elementary students, especially fifth grade, most resistant to movement. In contrast, the younger students were very participatory (personal communication, September 15, 2022).

Technology Challenges

Each area where each participant faced struggles. The inability to consistently observe students was a hurdle the participants had to overcome. Joy struggled because she "couldn't exactly see what they were doing, sometimes, so I didn't exactly know if they were doing it right," and it was challenging for her to look at 10-15 screens instead of observing students inperson (personal communication, August 12, 2022). Kendra had shy students and those "who were more hesitant and would turn their camera off. They say they're moving. Maybe they are, maybe they aren't, you know you can't really tell, and so it was a little bit more challenging." (personal communication, September 15, 2022).

Specific activities were difficult in the virtual classroom due to technology limitations, and the participants tried them with mixed results. Kendra described a game where they would pass the beat from person-to-person, and it was not "so successful" because there were pauses

between participants (personal communication, August 23, 2022). Despite this obstacle, Kendra observed that the students "thought it was fun to be able to keep watching, for when it was their turn to go, and then they had to keep the beat a different way, and we'd all change our movement to match them" (personal communication, August 23, 2022). Several participants mentioned the challenge with varied internet speeds and how delays made it difficult to evaluate if students were moving properly.

Participants shared other miscellaneous anecdotes regarding technological challenges. Natalie worried that students "could hit the laptop" because they were "going to move in my class." She addressed this by directing her students to "set up their laptops somewhere safe." Another difficulty for Natalie was when her county technology department would block websites she wanted to include in her instruction, which she described as "a never-ending battle" (personal communication, August 22, 2022).

Theme 4: Embodied Learning

Embodied learning is the synthesis of learning by using the body and connecting movement and concepts (Paniagua & Istance, 2018). While opinions about virtual education varied, all participants voiced the need to include movement in their lessons. Joy shared that some perceived virtual learning as a sit-and-get scenario, but she saw past this limiting belief and incorporated movement into her lessons. She did this because she felt that "even though they're home, they're still having to sit and learn. And so you need to get them to get up and move and because their little brains can't handle sitting there for even 30 minutes" (personal communication, August 12, 2022). A motivating factor for Joy to use movement was that "they're more inclined to come back and be excited to be in your class" (personal communication, August 12, 2022). Other participants connected with Joy's experience in their

virtual teaching. Kendra believed that "to really understand any concept, movement is the basis or the foundation of understanding a lot of musical skills. They feel it in their body, and then they're able to make a connection to what it really is. (personal communication, September 15, 2022)

Participants said that using movement to cement learning was beneficial. During the focus group, Kendra relayed that she "felt that for a lot of kids, movement solidified the learning. Sometimes music can be very abstract for students, and being able to use movement was a way that connected with several students to help them really understand" (personal communication, September 15, 2022). Sometimes helping students understand the material also meant that both the student and teacher were challenged to learn in a different way. Olivia commented that:

I don't think movement is something that you need to be scared to do. It's going to look different, and it's going to feel different than it would in-person classes, but that's okay. Kids are still kids. Whether they're on the computer or they're in your classroom, they want that. They want to play, and they want to move, so give them opportunities to do it in a productive, musical, educational way. (personal communication, August 23, 2022)

For Natalie, movement was an access point for all students to engage in learning. Some of her students were reluctant to sing and did not have instruments, but they all could participate in movement. She shared:

They love it. I mean, seriously, out of the whole school, I may have had five kids that were like, 'I don't want to do this,' but most of the time, the ones who don't want to sing, they'll do the movement. It gets them involved. I think some kids feel like, 'well, I can't sing, or I can't play an instrument,' which is why they don't want to. They were

intimidated by it. But everybody can pretend to be a horse. They do that for fun anyway. (personal communication, August 26, 2022)

In a similar vein, Olivia said that movement is natural for students and needed in their lessons: I know when I'm on Zoom for longer than an hour, it's a different kind of exhausted than it is from going to an in-person school. I think of movement as a lifeline for kids, their bodies need that. This is such a natural place to do that that it's really a disservice to them if you're not. (personal communication, August 23, 2022)

Olivia also said that including movement in her lessons "just seems like a no-brainer. That's part of just music as an art form that movement you have to have it in your body for you to really understand it" (personal communication, August 17, 2022).

Theme 5: Engaging Students and Their Families

Engagement and connections were vital for virtual education. With students learning remotely, the relationships between educator-student and educator-parent/guardian were imperative. Virtual educators needed the support of the adults who were physically present with students so the student remained on task and engaged in their learning. Other relevant relationships were educator-administrator and educator-educator.

Creating and maintaining student engagement was key to a positive classroom atmosphere and "engagement helps students make connections" (personal communication, August 23, 2022). Natalie shared challenges participants faced to keep their students engaged in the virtual environment.

I feel like you use movement to keep them engaged at that age, and to keep them from getting distracted. In the in-person setting they're poking in their neighbor, whereas at

home it's like, 'let me go mess with my dog or cat. Let me go get a drink of water. Let me go do this.' (personal communication, August 22, 2022)

Natalie continued to describe how her students' learning environments affected their engagement. She shared in her first interview:

Some of our parents are phenomenal, and they have a great room where they can study. Then some of our parents, they're just in the living room and somebody's got the TV on in the background. Even though we're like 'that is not the way they're supposed to be learning' (personal communication, August 22, 2022).

Kendra incorporated students' cultures and music preferences when planning movement instruction, which helped her connect with her students. She shared:

It was a cultural connection, because we could do things with music, like dancing. We would learn different dances, and we would listen to popular music, and the kids could show me some of their dances, and we would use that. We can take some of the popular dances that they're learning at home things that they already are a part of their culture and their experience, and then bring it into the classroom and say, 'hey, that really cool thing that you're doing here, are there musical things that we can learn from it?' That's relevant and that really helped with engagement, but also helped with kids understanding concepts more when it was something they were already familiar with. (personal communication, August 23, 2022)

Kendra discussed including student-selected music when she noticed "a particular kid who's not really participating a lot in the movements." She would ask them after class to stay for a second and then say "What's one of your favorite songs?" She continued:

I'm just not that cool anymore. And I was really trying to come up with a really fun song to use for our next movement activity in the class, and I was wondering if you had any idea. Do you have some favorite songs, could you give me some suggestions we could use in the next class? Then they'd be like, 'Oh, yeah!' and they tell me some ideas, and then I'd use that song as our steady beat movement, or warm-up movement and then they would kind of be more engaged during the class, because I was picking things that they knew. They felt this ownership. She asked me, and she listened to me and used it. (personal communication, September 1, 2022)

Another key to engagement was varying lessons, so that students had an assortment of engaging activities. Natalie shared that if she noticed her students were looking tired she would say "Okay, we're going to stand up and do this and move around" (personal communication, August 22, 2022) with the hopes movement would increase their engagement. Natalie continued by saying some of her students who normally didn't engage in her class would participate in movement activities. When this happened, she felt "Yes! I'm really winning today, I got everyone engaged!" (personal communication, August 22, 2022).

Student Leadership

All participants shared how they included student-led movement in their lessons. Many of the activities where students were the leaders took place with a gradual release model. This model progressed from teacher modeling, to guided practice, to independent practice (McVee et al., 2019). Each had different ways of including students in this process. Kendra described her process:

They would gradually be able to create. We've done ten different movements that you've mirrored with our bodies. Now you come up with your own movement. Then one kid

would do a movement, and then all of us would do the same movement they are doing, and then the next person takes a turn. So gradually helping them understand this is how we do this movement musically. I'm going to give you lots of examples that you follow, and then you can create your own. (personal communication, August 23, 2022)

Natalie found that student-led activities were "very popular" (personal communication, August 22, 2022). Olivia said that she had students lead, but due to the large class size, she directed her students to follow her if they could not see their classmates on the screen (personal communication, August 17, 2022).

When selecting student volunteers, the participants approached this task differently. Joy encouraged student leaders; sometimes, she would call on individuals, but more often, she asked for volunteers. She preferred volunteers because "there were kids that were really excited about showing you what they did, and they would unmute themselves, do it themselves, and show the class. (personal communication, August 24, 2022) Natalie also asked for student volunteers and assessed students without making them aware it was happening (personal communication, August 26, 2022). Olivia assessed kindergarten and first-grade students while they led movements for their peers (personal communication, September 15, 2022).

Many of the student-led activities involved beat-keeping and creating movement centered around beat. Kendra would ask students to "lead and show us the beat." Leading helped her students focus as they had to be aware of when it was their turn and react quickly so there was no pause in the activity (personal communication, August 23, 2022). Olivia went as far as to include student-led beat movement in every kindergarten and first grade class (personal communication, August 17, 2022). Connected to beat keeping was rhythm; this was another concept where student leadership was successful. Kendra's fifth graders successfully led the

"poison rhythm game" and they "really like to be the one who would do that activity" (personal communication, August 23, 2022).

In addition to beat and rhythmic activities, students led their peers in creative movement. Natalie asked her students to create a movement to accompany nursery rhymes when she was "stumped," and she would ask them, "What should we do?" (personal communication, August 22, 2022). Kendra asked student leaders questions such as "What's a way that you think we could move to match this music?" "How would you need to show high? How would you need to show low?" (personal communication, August 23, 2022). Student leaders would show movements to depict musical elements, like high and low, when singing or listening to music.

Kendra's students embraced the leadership opportunity. She chose to incorporate studentled lessons because:

There are some kids who were just really craving the opportunity, being at home and not really having a lot of connection with their peers or opportunities to share their expertise or share out. So that was one way that kids could be engaged and do something, and their classmates were almost more attentive to them. I could have done the same lesson, and they would be like, really, we don't want to do this movement. Oh, this is so lame with the fifth graders. But then their two classmates are teaching everybody's like, Oh, that's so awesome. I just love that! (personal communication, August 23, 2022)

One lesson was a cup rhythm activity. The students "knew that cup rhythm, and so they taught the class. They prepared their lesson, they prepared their slides, they taught the whole class how to do the cup rhythm activity." Another example was from a pair of fourth-grade girls "who showed us all how to do the song "Bobo Ski Waten Taten." They taught the class, and then we

all picked our partner on the screen and watched our partners and practiced the hand clapping game." (personal communication, August 23, 2022).

Family Engagement

Students' families were key players in the success of a virtual school. Movement lessons were engaging for students, parents, and siblings alike. When family members were engaged, they supported their students' learning and validated the educator's lessons. There was also much joy and fun added to lessons when families learned together.

Some parents were actively involved in their student's day-to-day learning. For example, Natalie had a father who was very engaged with his young daughter's learning. She shared:

I have this one first-grade parent, this is my second current year with her. Her dad is right there with her at the table, and he helps her and encourages her. Her dad is so good, and they have fun together. It's fun to get to participate as a family which doesn't happen in the classroom, unless you have a parent night. (personal communication, September 15, 2022)

When Joy taught her paper plate dancing lesson connected to "The Trepak from The Nutcracker," she had a mother and daughter dancing together. She shared, "It was like the cutest thing in the world. I loved it so much, I was like, 'Oh my gosh that's awesome, you know, like everybody watch her, that's so cool!" (personal communication, August 12, 2022). Olivia also had parents come "every once in a while" (personal communication, August 17, 2022).

Sibling sightings were also common in the participant's classes. Joy shared, "I would have siblings come and sing, and they would say, 'Oh my gosh, we love this song. I'm going to come and sing it, you know my sister's here she's gonna sing it with me"" (personal communication, August 12, 2022). Kendra had a similar experience and shared, "There were

definitely younger siblings who were like 'it's music time.' He wasn't in school yet, but they did all the music activities and movements with us' (personal communication, August 23, 2022). Natalie encountered siblings of all ages in her lessons.

Yes, lots of younger siblings, there are several kids that had toddler brothers and sisters, and they would hear the music, and they would slowly wander in the background. I'd see them dancing with us, and [the students asked], "Is it okay?" I'm like, as long as they're not being disruptive, leave them here. I have lots of two or three year olds that are wandering in, or sometimes I'll have siblings, sometimes older siblings that have me for music class and they would wander in and say "Oh, you got the Music teacher right now?" (personal communication, August 22, 2022)

Natalie found music class especially popular with the "two, three and four-year-olds" (personal communication, August 22, 2022, August 26, 2022). Olivia also had toddler siblings come to music class, and she thought it may have been "kind of entertaining" for the toddlers "to see this weird lady dance around with her guitar and stuff." She also thought that "the parents probably enjoyed that fifty minutes that their baby could watch, too" (personal communication, August 17, 2022).

At times siblings who were all students at the virtual school came together on the same screen. Regarding Natalie's Music class, she said, "I don't know what they were supposed to be doing; they probably were supposed to be doing some independent activity" (personal communication, August 22, 2022). Olivia had twins in her school and shared that "sometimes they would come on separate screens in separate rooms, but sometimes they would come together on one screen, and that was just really cool" (personal communication, August 17, 2022).

Participants shared how family members attendance affected them emotionally. Joy shared:

I was super happy seeing brothers or sisters coming and sitting in, even just a consistent song, like a welcome song that we always did. They would come in because they knew it. They were excited to see what we were doing next, or the parents coming on and enjoying it too, that was that was really cool to see. Because in-person, you don't see that because they're not there. It's that validation that you get, like saying, okay, maybe I am doing an okay job here. I'm doing things that these kids are excited about, because I can see the family members being excited about it, too. (personal communication, September 15, 2022)

Natalie had a similar experience when students' family members engaged in her lessons:

I think one of my most favorite thing is the siblings that wander in. There's some things that I did with multiple grade levels, so the kids knew the song, or the movement activity that we were doing. If the older sibling had a break, they would wander in, and they do it with them. They were like "Hey, look it's me!" Or the two or three or four-year-olds in the house that would wander in, and they're in the background. It's so cute, so much fun! They're like "Can we do this too?" Sure, I don't care because as long as they are not distracting you. They're not distracting me. I've had parents that came in and did activities with them. Especially some kindergarten parents that are like really on it. (personal communication, September 15, 2022)

Kendra enjoyed receiving videos through Seesaw or Flipgrid with her students engaging in activities with their families. Sometimes students would teach the music lesson to their family members after the school day ended. Kendra received proof of this through her student submitted

videos, "I would say, teach this to your family tonight, and you can send me a video on Seesaw with you and your parents doing this together" (personal communication, August 23, 2022). In the focus group, she shared:

One time we learned a cup passing game. Several students showed me videos of them with their siblings and parents around the table with the cup. That always does warm your heart when you see how what you taught became a fun memory and experience for the whole family. (personal communication, September 15, 2022)

When she taught "Surprise Symphony," Kendra would have her students bring a family member to class and surprise them and "Then they would jump at that person. It was so fun, and everybody's laughing" (personal communication, September 15, 2022). The benefit of having family involvement was the solidification of learning and engagement beyond class time.

Conclusion

The five themes highlight the virtual teaching experiences of the four participants. Despite the challenges and limitations they described, participants included various types of nonlocomotor and locomotor movement activities in their lessons. Participants adapted in-person lessons for virtual instruction and created new lessons specifically for the virtual environment. Including movement vocabulary grew students' musical and kinesthetic understanding. Participants included opportunities for teacher-led and also peer-led activities empowering students to lead their classmates. Using items commonly found in students' homes as props, like stuffed animals and cups, provided equal access to resources. These props helped students gain confidence with movement activities. From dancing to beat keeping activities, movement provided an opportunity to keep students engaged, include their families in their experiences, and learn musical concepts. In the following chapter, I explicitly answer the four research questions.

CHAPTER V: RESEARCH QUESTIONS AND IMPLICATIONS

The purpose of this study was to examine how elementary virtual music educators use movement in their lessons. The research questions were: (a) What types of movement activities do virtual music educators use in their lessons? (b) How do virtual elementary music educators evaluate and assess movement activities? (c) What are the benefits of including movement in virtual elementary music lessons? and (d) What challenges are associated with including movement in virtual elementary music lessons? I collected data from four virtual elementary music educators through interviews, journal prompts, lesson plans, and a focus group. Analysis resulted in five themes: types of movement, planning for movement instruction, challenges when including movement, embodied learning, and engaging students and their families. The following insights were provided by the participants and connected to existing research.

Research Questions

What Types of Movement Activities Do Virtual Music Educators Use in Their Lessons?

Participants used a variety of movement activities in their lessons, including locomotor and non-locomotor activities. Researchers have documented ways of including movement in early childhood to tertiary classes (Metz, 1989; van der Merwe, 2015). Participants scaffolded movement learning to facilitate students' success. For example, Kendra would "isolate just a few movements when they're younger" and "focus on one level," so "it was very guided for the younger kids" (personal communication, August 23, 2022).

Movement activities varied from dancing to beat-keeping to found sounds. All participants shared how they would use found sounds as instruments to "keep a steady beat" (personal communication, August 12, 2022) and used body movement to demonstrate understanding of the beat. Similar to the participants experiences, Rose (1995) found Dalcroze Eurhythmics classes improved beat competency. Body percussion was commonly mentioned for rhythmic and beat activities, which can benefit synthesis of these concepts according to Andrews (1982). Participants shared how they used folk dances without partners and used hand movements with music because it was easily visible in the videos.

Participants had students explore specific concepts through movement and used creative movement as part of this process. Each activity had a different objective; some activities would be used multiple times and grow in complexity. The variety of movement choices helped engage students and provided them with movement vocabulary to move independently and lead their classmates.

Participants included creative movement using children's literature, classical music, and games. The text in children's literature inspired students to create movement. Programmatic music like "Peter and the Wolf" was the starting point for including animal movements and movements connected with specific instruments (personal communication, September 1, 2022). Natalie described the game "Imagination," where students would include poses when creating movement (personal communication, August 22, 2022). They learned to use their body as an instrument, which was espoused by Jaques-Dalcroze (Farber & Parker, 1987). These creative movement opportunities align with the Orff-Schulwerk approach and connect with movement exploration in the FSIM curriculum (Feierabend, 2006; Keetman, 1974).

Participants connected movement with musical concepts through expressive movement. To some extent, all five elementary general music approaches incorporated movement when learning beat, tempo, and rhythm (Abril & Gault, 2016; Feierabend, 2006). Teachers guided their students to move to show the musical contour, express dynamics, and explore tempos kinesthetically. The Orff-Schulwerk exposure the participants had may have guided them to
consider utilizing movement in this fashion (American Orff Schulwerk Association, 2013; Keetman, 1974; Lasko, 2016).

Participants used props frequently in their movement lessons, particularly scarves. Props especially helped students who were hesitant to move or had special needs. Kendra instructed students to bring a stuffy to class, and "everybody would make their stuffy move" (personal communication, August 23, 2022) This type of scaffolding and confidence building was vital for students to gain movement skills and overcome their self-consciousness.

How do Virtual Elementary Music Educators Evaluate and Assess Movement Activities?

Participants evaluated and assessed movement activities synchronously and asynchronously. Poor internet speed or latency negatively affected the participants' abilities to assess movement activities in real time. However, they addressed this challenge by having students submit video assignments. Participants utilized platforms like Seesaw and Flipgrid (now known as Flip) for students to record videos demonstrating their learning using movement. Kendra included rubrics in her instructions to ensure students included all information in their assignments using these platforms, a practice supported by Juntunen and Eisenrich (2019) (personal communication, September 1, 2022).

Assessing students in real-time varied, but all participants used visual assessment of group instruction, typically without students being aware that it was happening. Participants' assessed musical concepts like beat and rhythm through movement, and also participation. Some participants utilized props like scarves or a ball for movement activities and would determine student understanding based on how they moved these objects. Kendra shared an example where students selected a ball, like a basketball, and bounced it to the song's rhythm. Students focused on the object and were less aware that of the assessment occurring (personal communication,

September 1, 2022). Having students lead for movement activities also provided participants with opportunities for individual assessment.

What are the Benefits of Including Movement in Virtual Elementary Music Lessons?

Participants included movement because it was developmentally appropriate and aided in extrinsic motivation. Because students spent much of their time in other classes sitting, participants deemed it appropriate for them to move in music class. Motivation to attend class was another benefit. Joy shared that by using movement, "I feel like they're more inclined to come back and be excited to be in your class" (personal communication, August 12, 2022). Movement engaged students in their learning and provided them with opportunities for leadership and to incorporate student-choice. Engaging students kinesthetically energized instruction and reinforced concepts, a similar to plastique animée in Dalcroze Eurhythmics (Butke et al., 2016).

Using movement to connect with children's literature and repertoire helped students to build music and language vocabulary. For example, Kendra shared that she would guide her students to "match their movement to the music," and Olivia used the book *The Lady with the Alligator Purse* as the basis for students to create statues matching the text. Establishing this movement vocabulary benefited students because they could use these terms as a foundation and grow to include more creative and expressive movements.

Participants were creative in how they incorporated movement, especially found sounds, which improved access for students. Their ability to adapt and adjust in the moment, such as when Olivia told students to grab a shirt, paper towel, or even dirty shirt off the floor, resulted in inclusive experiences for students (personal communication, August 17, 2022). Participants asked students to use props they had in their homes, like stuffed animals and Natalie included a

scarf in her students' supplies at the start of the year, thereby providing equality of resources (personal communication, August 26, 2022). Kendra explained that her students "were very self-conscious about singing," and moving was an activity more students were willing to engage in (personal communication, August 23, 2022).

Participants experienced connection and engagement with students and their families through movement activities. Kendra collaborated with her students to incorporate students' cultural and preferred music in lessons to foster interest (personal communication, August 23, 2022, September 1, 2022). When students engaged in their learning, they sought leadership roles. Whether leading a beat motion activity or designing and teaching a lesson, students from kindergarten through fifth grade had the opportunity to lead during music lessons.

Family engagement during and beyond class time also increased through movement activities. Family members, from toddlers to adults, joined students during class to dance and move together. Kendra shared how her students would teach dances to their family members and when it came time to submit a video assignment, they would dance with a group (personal communication, August 23, 2022). Students experienced the joy connected with community music learning through movement, as was described by van der Merwe (2015) with students in South Africa.

What Challenges are Associated with Including Movement in Virtual Elementary Music Lessons?

Participants faced challenges with technology and learning environments. School schedules and lack of adult support at home sometimes exacerbated the challenges. Teachers were continually adapting resources to fit in the virtual learning environment. Students struggled

with self-confidence and having autonomous learning spaces conducive to movement. Varied internet speeds and delay were challenges that affected both teachers and students.

Perceived student challenges included being self-conscious, lacking self-confidence, and having learning spaces not conducive to movement. In some cases, students found certain aspects of music learning, like singing, less desirable and movement was a successful alternative (personal communication, August 23, 2022). Mercado (2021) found that students' learning spaces hindered their ability to move because they would disturb another sibling or an adult who might have been working or sleeping. Sometimes students sat close to other students who were also learning virtually in the home, thus preventing them from fully engaging in movement activities (personal communication, August 26, 2022).

Participants struggled with students who would or could not turn on their cameras due to slow internet speed. They also commented that viewing individual student videos as opposed to scanning a class of in-person students was difficult. Internet delay also made assessment challenging because the participants did not always see student movement in real time. This problem aligned with findings from Daugvilaite (2021) in the one-on-one lesson environment.

Adapting materials from in-person learning to the virtual environment also presented a challenge. Some curriculums have technology resources, but were not specifically designed for virtual elementary music education. Participants found that some activities they used for inperson learning translated well to the virtual environment but excluded other activities because they required partners. Planning instruction for virtual learning required the participants to have creativity and flexibility.

Summary

The four participants used movement in myriad ways as part of their instruction. Using movement in the virtual environment came with the need to adapt resources and work through technological challenges. Overcoming these challenges was worthwhile for students to connect musical learning through movement activities in a virtual learning situation that is typically sedentary. The ways they engaged in movement varied from folk dancing, to embodying an animal, to body percussion. The variety of movement opportunities provided by participants culminated in students leading the class and engaging family members in their learning.

Implications for Practice and Future Research

As part of this research, I asked the participants what types of movement they would like to include in future lessons, what professional development would have supported their role as a virtual music educator, and what insight they would give to other virtual elementary music educators. Participants answers provided insight into what they thought would be considerations for future practice and research. My suggestions for practice and research are woven in with the participants' suggestions regarding virtual elementary music education and future research.

Professional Development for Inservice Teachers

Diversifying professional development, to incorporate movement in the virtual environment is a growth opportunity in music education professional development. This professional development can include formal courses, workshops, and informal colleague collaboration. One solution to helping educators who desire professional development is to utilize the expertise of experienced educators, and this is what Olivia shared about how she feels prepared to lead professional development:

Now that I've gone through two years of virtual teaching, I feel prepared to share things that I tried and found worked for students. More experts in the field have more to offer now that virtual learning has been part of our education system for a few years, and hopefully, those that feel compelled can share what they know with future virtual teachers. (personal communication, September 4, 2022).

School districts and professional organizations must regularly offer professional development specific to virtual teaching to support virtual educators and those who will be teaching for remote learning days. Natalie shared her feelings about support when she said, "I would say, virtually, that counties need to do more to support their teachers and create more consistency" (personal communication, August 22, 2022). To keep this cost-effective, school districts can collaborate so their virtual music educators are part of a professional learning community specific to their needs. I organized such a community, and for the past two years, a group of virtual music teachers in my state met once a month to share lessons and strategies that work in our classroom and to help brainstorm solutions for challenges we have experienced. An advantage of virtual music educator PLCs is that state lines do not bind it because the group meets virtually. Additionally, professional organizations like the National Association for Music Education (NAfME), AOSA, OAKE, or others also could offer consistent professional development for virtual music educators. Such professional development could utilize educators teaching virtually as presenters. Part of this professional development would be overcoming obstacles to movement inclusion and how to adapt movement materials for the virtual environment.

For educators to know if their instruction is beneficial, they need to have assessments in place. Because of the delay associated with various internet speeds, assessment in real-time can

present a challenge. Virtual educators can adapt existing rubrics and assessments, but it would be beneficial to have virtual-specific options. Providing a rubric for student video recordings would establish clear expectations for the student and aid the teacher. Another option is to create sets of reflection questions students can answer verbally or in the chat during class. A resource providing sequential folk dances and movement activities adapted for the virtual environment would also be helpful. Part of this resource could include assessment strategies. These assessment ideas aim to ensure that movement is a purposeful and meaningful part of virtual music instruction.

Educator Preparation Programs and Preservice Teachers

For elementary music educators to succeed in the virtual environment, they need to have preservice instruction which sets them up for success. Virtual education is a permanent part of the education landscape, whether as a virtual school or remote learning days. This change in education requires adjustments in educator preparation programs (EPPs). To prepare preservice educators for virtual teaching, EPPs need to embed opportunities for students to learn teaching strategies in this environment. A course on virtual teaching is not warranted, however, method courses can include the creation of asynchronous and synchronous movement lessons which will help students when they have remote learning days or when they need to prepare substitute lessons. Olivia shared that at the collegiate level, methods classes should have students think through how to adapt lessons for virtual instruction (Olivia, personal communication, August 23, 2022). Video-taping lessons will also be useful to students for when they need to submit videos as components for their edTPA portfolio or National Board Certification components.

Observations of virtual classes should also be a part of EPPs. I recommend having one or two observations in the virtual environment included in pre-student teaching observation hours. Observing virtual classes requires less logistical coordination and is not limited by location, meaning students can observe teachers from anywhere. Olivia shared that her former student teacher expressed that her first teaching position included virtual classes and she was thankful her student teaching experience included virtual experiences (personal communication, August 23, 2022). I have had students from three states observe my classes as part of their requirements, and many shared how they enjoyed the experience and were surprised at how active we were in class. The lessons they observed could be adapted from virtual to in-person learning environments so the preservice students can apply what they learn to any teaching circumstance.

Preservice teachers need to acquaint themselves with available technology resources. Some examples the participants used were SeeSaw and Flip, but there are many additional applications and resources to explore. Instructors can incorporate these resources and have students submit reflections or performance recordings to familiarize themselves with the applications. Students and educators can use it to provide feedback to each other and become acclimated to recording and watching themselves in videos. Another important technology component is the learning management system, with which students should become familiar.

Recommendations for Future Research

This study provided insights into the experiences of four virtual elementary music educators and their incorporation of movement in their virtual classes. There is a need to conduct future studies with diverse populations of educators and students, including location, race, and educator experience. Another area to consider is the effect of professional development on the incorporation of movement in music instruction. Participants were guided by their prior experience when including movement, some of which was influenced by Orff-Schulwerk training. The five approaches in elementary music education discussed here involved movement

as part of their teacher education courses (American Eurhythmics Society, n.d.; American Orff Schulwerk Association, 2013; Dalcroze Society of America, n.d.; Feierabend Association for Music Education, n.d.; The Gordon Institute for Music Learning, n.d.). For virtual elementary music educators to progress in the inclusion of movement, studies on how these approaches influence educators' use of movement are needed.

Using varied methodologies to explore different aspects of virtual music education and virtual learning would be advantageous to educators, learners, and parents. This study employed a case study approach, but using narrative approach to focus deeply on one full-time elementary music educators' experience who has taught virtually both pre- and post- ERL would be useful. The study could focus on a participant who is certified in one of the five general music approaches included in this study and see how their training influences how they include movement in their lessons. Additionally, it would be beneficial to use grounded theory to find common processes from a wider population than used in the current study. A descriptive large-scale survey could also assess the status of movement in virtual elementary music education (Creswell & Poth, 2018).

The following considerations to this study need to be acknowledged. Participants were from two states, resulting in minimal geographic variety. Participants also were femaleidentifying. Though that is typical for this music teaching specialization, including participants of other gender identities would be appropriate. Expanding the number of participants, varying their location, and including more full-time virtual educators would be another consideration for future research and may improve transferability.

While this study focused on movement in virtual elementary music education, participants shared experiences beyond teaching movement that warrant exploration.

Investigating educators' desire to teach virtually and the curricular, administrative, and technology supports needed to be successful would be appropriate. I recommend investigating why educators desire to teach in the virtual environment and what supports need to be in place for them to be successful. Studies exploring how virtual educators teach other aspects of music, such as singing and composition, are also needed. I also suggest researching engagement with virtual students to improve their academic achievement and musical understanding.

An additional area of recommended inquiry is how virtual music educators outside the elementary level use movement in their classes. These levels can include preschool and younger and middle school into adulthood. Existing studies address how in-person classes at all levels use movement but include little information about the use of movement in virtual music classes (Fisher & Rose, 2011; Sims, 1985; van der Merwe, 2015). Future research focusing on intentional virtual education rather than ERL is needed. Virtual music education is a growing field, and this and future studies will contribute to student and educator success.

This study provides a glimpse into how four virtual elementary music educators incorporated movement into their instruction. This topic had not been explored previously and the findings shared here contributed new knowledge to the field of music education. The findings of this study highlight the positive benefits movement had in the education of elementary students and the need to include this mode of learning in the virtual environment.

REFERENCES

Abramson, R. M. (1980). Dalcroze-based improvisation. *Music Educators Journal*, 66(5), 62–68. https://www.jstor.org/stable/3395778

Abril, C. R., & Gault, B. M. (2016). *Teaching general music: Approaches, issues, and viewpoints*. Oxford University Press.

https://doi.org/10.1093/acprof:oso/9780199328093.001.0001

- Alperson, R. (1995). A qualitative study of Dalcroze Eurhythmics classes for adults (Publication No. 9603274) [Doctoral dissertation, New York University]. ProQuest Dissertations & Theses Global
- American Eurhythmics Society. (n.d.). *AES Certification*. Retrieved November 11, 2021, from https://americaneurhythmics.org/rationale-for-teaching/
- American Orff Schulwerk Association. (2013). *Movement philosophy and standards matrix*. American Orff Schulwerk Association.

https://member.aosa.org/storage/files/shares/CMS%20Pages/TE%20Content/Curriculum %20Docs/movement%20philosophy%20and%20standards%20matirx%2003-28-

13(1).pdf

- American Orff-Schulwerk Association. (2023). American Orff-Schulwerk Association Website. http://aosa.org/
- Andreae, G., & Parker-Rees, G. (2001). *Giraffes can't dance*. Orchard Books, an imprint of Scholastic Inc.
- Andrews, N. A. (1982). The Orff-Schulwerk approach to movement and music. Journal of Physical Education, Recreation and Dance, 53(1), 76–77. https://doi.org/10.1080/07303084.1982.10629292

- Barbour, M. K. (2011). The promise and the reality: Exploring virtual schooling in rural jurisdictions. *Education in Rural Australia*, 21(1), 1–19.
- Becknell, A. F. (1970). A history of the development of Dalcroze Eurhythmics in the United States and its influence on the public school music program (Publication No. 71-4546)
 [Doctoral dissertation, University of Michigan]. ProQuest Dissertations & Theses Global
- Beegle, A., & Bond, J. (2016). Orff Schulwerk releasing and developing the musical imagination. In C. R. Abril & B. M. Gault (Eds.), *Teaching general music: Approaches, issues, and viewpoints* (pp. 25–48). Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199328093.001.0001
- Bianchi, W. (2002). The Wisconsin school of the air: Success story with implications. *Journal of Educational Technology & Society*, 5(1), 141–147.
- Blakemore, E. (2017, June 16). *The slave roots of square dancing*. JSTOR Daily. https://daily.jstor.org/the-slave-roots-of-square-dancing/
- Boston University. (n.d.). Online DMA Music Education | College of Fine Arts. Retrieved January 10, 2023, from https://www.bu.edu/cfa/academics/degrees-programs/musiceducation/online-dma/
- Bramble, W. J. (1986). Distance learning in Alaska's rural schools. *Learning Tomorrow. Journal* of the Apple Education Advisory Council, 4, 241–256.
- Branson School Online. (2019, 2020). *Branson School Online*. Branson School Online: Learn Anytime, Anywhere. https://bransonschoolonline.com/
- Butke, M. A., Frego, R. J. D., & Wenner, J. (2016). *Meaningful movement: A music teacher's guide to Dalcroze Eurhythmics*. Music Is Elementary.

- Callen, D. M. (2012). Moving to music: For better appreciation. *The Journal of Aesthetic Education*, *19*(3), 37–50. https://www.jstor.org/stable/3332642
- Camlin, D. A., & Lisboa, T. (2021). The digital 'turn' in music education. *Music Education Research*, 23(2), 129–138. https://doi.org/10.1080/14613808.2021.1908792
- Carl-Orff-Stiftung. (n.d.). *Günther School: Orff*. Retrieved November 15, 2022, from https://www.orff.de/en/life/educational-works/guenther-school/
- Choksy, L. (1987). *The Kodaly Method: Comprehensive music education from infant to adult* (2nd ed.). Prentice Hall.
- Choksy, L., Abramson, R. M., Gillespie, A. E., Woods, D., & York, F. (2001). *Teaching music in the twenty-first century* (2nd ed.). Prentice Hall.
- Choksy, L., & Kodály, Z. (1981). *The Kodály context: Creating an environment for musical learning*. Prentice-Hall.
- Clark, T. (2013). The evolution of K–12 distance education and virtual schools. In M. G. Moore (Ed.), *Handbook of Distance Education* (3rd ed., pp. 555–573). Routledge. 10.4324/9780203803738.ch35
- Cleland, R. (2009). Assessment: An informative tool: *Perspectives: Journal of the Early Childhood Music & Movement Association*, 4(2), 1–1.

https://doi.org/10.1386/IJMEC_0108_7

- Crabtree, E. (2017). Silence and stillness: Moving to internal rhythms. *The Orff Echo*, 49(2), 16–21.
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). SAGE Publications, Inc.

- Dalcroze Society of America. (n.d.). *Dalcroze Credentials*. Retrieved November 11, 2021, from https://dalcrozeusa.org/teacher-training/dalcroze-credentials-and-requirements/
- Dammers, R. J. (2009). Utilizing internet-based videoconferencing for instrumental music lessons. Update: Applications of Research in Music Education, 28(1), 17–24. https://doi.org/10.1177/8755123309344159
- Dances of the 7 continents for kids & teachers. (2006). [Video]. In *Dance along with Sanna* Longden ; no. 6-7. FolkStyle Productions.
- Darrow, R. W. (2010). A comparative study between online charter high schools and traditional high schools in California (Publication No. 9531852) [Doctoral dissertation, California State University, Fresno]. ProQuest Dissertations & Theses Global
- Daugvilaite, D. (2021). Exploring perceptions and experiences of students, parents and teachers on their online instrumental lessons. *Music Education Research*, 23(2), 179–193. https://doi.org/10.1080/14613808.2021.1898576
- Daum, D. N., & Buschner, C. A. (2018). Research on teaching K-12 online physical education.
 In K. Kennedy & R. E. Ferdig (Eds.), *Handbook of research on K-12 online and blending learning* (2nd ed., pp. 21–40). Carnegie Mellon University: ETC Press.
- Davis, A., Amidon, P., & Brass, M. C. (1997). *Listen to the mockingbird: More great dances for children, schools & communities.* New England Dancing Masters Productions.
- Davis, A., Brass, M. C., Amidon, P., & New England Dancing Masters Productions. (2010).
 Chimes of Dunkirk: Great dances for children. New England Dancing Masters
 Productions.
- Dutkiewicz, B. (2020). Teaching music for pre-school children through physical activities and bodily experiences according to the assumptions of the eurhythmics method of Emil

Jaques-Dalcroze. *Counterpoints of the Senses: Bodily Experiences in Music Learning*, 32–40.

Farber, A., & Parker, L. (1987). Discovering music through Dalcroze Eurhythmics. *Music Educators Journal*, 74(3), 43–45. https://doi.org/10.2307/3397940

Favorite folk dances of kids & teachers. (2004). [Video]. FolkStyle Productions.

Feierabend Association for Music Education. (n.d.). FAME Curriculum Certification. Feierabend Association for Music Education | A Tuneful, Beatful, Artful Learning Community. Retrieved December 30, 2022, from https://www.feierabendmusic.org/certification/

Feierabend, J. M. (1996). Conversational solfege, level 3-Teacher's edition. GIA Publications.

Feierabend, J. M. (2000a). Conversational solfege, level 2-Teacher's edition. GIA Publications.

Feierabend, J. M. (2000b). Music and movement for infants and toddlers: Naturally wonder-full. In MENC, The National Association for Music Education (Ed.), *Spotlight on early childhood music education* (pp. 34–39). MENC, The National Association for Music Education.

Feierabend, J. M. (2001). Conversational solfege level 1-Teacher's edition. GIA Publications.

Feierabend, J. M. (2002). First steps in music for infants and toddlers. GIA Publications.

Feierabend, J. M. (2006). First steps in music for preschool and beyond. GIA Publications.

Feierabend, J. M. (2014). The book of song dances. GIA Publications.

Feierabend, J. M. (2020). *The book of fingerplays & action songs: Let's pretend* (Revised edition). GIA Publications.

Feierabend, J. M., & Kahan, J. (2004). The book of movement exploration. GIA Publications.

Fisher, R., & Rose, P. (2011). Effects of age, experience, and instruction on elementary music teacher movement self-efficacy: A pilot study. *Texas Music Education Research*, 24–37.

- Fortuna, S., & Nijs, L. (2020). Children's representational strategies based on verbal versus bodily interactions with music: An intervention-based study. *Music Education Research*, 22(1), 107–127. https://doi.org/10.1080/14613808.2019.1699521
- Frego, R. J. D. (2017). Visibly still: Using silence and movement to develop inner hearing in the Dalcroze classroom. *The Orff Echo*, *49*(2).

Gault, B. M. (2016). Kodály-inspired teaching: A bridge to musical fluency. In C. R. Abril & B.
M. Gault (Eds.), *Teaching General Music*. Oxford University Press.
https://doi.org/10.1093/acprof:oso/9780199328093.003.0005

Gibson, G. F., & Rankin, L. (2014). Tiptoe joe. Scholastic.

- Gibson, S.-J. (2021). Shifting from offline to online collaborative music-making, teaching and learning: Perceptions of Ethno artistic mentors. *Music Education Research*, 23(2), 151– 166. https://doi.org/10.1080/14613808.2021.1904865
- Giráldez Hayes, A., & Carabias Galindo, D. (2014). Collaborative music production in a virtual learning environment: An experience with English and Spanish students. *Proceedings of the Sempre MET2014: Researching Music, Education, Technology: Critical Insights*, 89–91.
- Gordon, E. (2012). *Learning sequences in music: A contemporary Music Learning Theory*. GIA Publications.
- Hartmann, W. (2021). Looking at the roots: A guide to understanding Orff Schulwerk. Pentatonic Press.
- Hash, P. M. (2021). Remote learning in school bands during the COVID-19 shutdown. *Journal of Research in Music Education*, 68(4), 381–397. https://doi.org/10.1177/0022429420967008

- Hodges, C. B., Moore, S., Lockee, B. B., Trust, T., & Bond, M. A. (2020). The difference between emergency remote teaching and online learning. *Educause.Edu*. http://hdl.handle.net/10919/104648
- Howley, C. B., & Harmon, H. L. (2000). K-12 unit schooling in rural america: A first description. *Rural Educator*, 22(1), 10–18.
- Jackson, J. M. (2015). An examination of the perceptions of online physical education: How fit is online PE? (Publication No. 3710217) [Doctoral dissertation, Bowling Green State University]. ProQuest Dissertations & Theses Global
- Jacobi, B. S. (2016). Rhythm through experience: Placido de Montoliu's instructional approach to Dalcroze eurhythmics in Pennsylvania in the early twentieth century. *Journal of Historical Research in Music Education*, 37(2), 105–128.

https://doi.org/10.1177/1536600616643231

Jaques-Dalcroze, É. (1972). Rhythm, music, and education (H. F. Rubinstein, Trans.). B. Blom.

- Johnson, M. D. (1993). Dalcroze skills for all teachers. *Music Educators Journal*, 79(8), 42–45. https://doi.org/10.2307/3398597
- Juntunen, M.-L., & Eisenreich, C. (2019). Assessment in Dalcroze pedagogy. In *The Oxford* handbook of assessment policy and practice in music education. II (pp. 561–590). Oxford University Press.
- Juntunen, M.-L., & Hyvönen, L. (2004). Embodiment in musical knowing: How body movement facilitates learning within Dalcroze Eurhythmics. *British Journal of Music Education*, 21(2), 199–214. https://doi.org/10.1017/S0265051704005686

Keetman, G. (1974). Elementaria: First acquaintance with Orff-Schulwerk. Schott and Co. Ltd.

- Kentor, H. (2015). Distance education and the evolution of online learning in the united states. *Curriculum and Teaching Dialogue*, *17*(1 & 2), 21–34.
- King, A., Prior, H., & Waddington-Jones, C. (2019). Exploring teachers' and pupils' behaviour in online and face-to-face instrumental lessons. *Music Education Research*, 21(2), 197– 209. https://doi.org/10.1080/14613808.2019.1585791
- Kriske, J., & DeLelles, R. (2005). *Game plan 1: An active music curriculum for children*. Kid Sounds.
- Kriske, J., & DeLelles, R. (2006). *Game plan 2: An active music curriculum for children*. KiD Sounds.
- Kriske, J., & DeLelles, R. (2007). *Game plan 3: An active music curriculum for children*. Kid Sounds.
- Kriske, J., & DeLelles, R. (2008). *Game plan 4: An active music curriculum for children*. Kid Sounds.
- Kriske, J., & DeLelles, R. (2009). *Game plan 5: An active music curriculum for children*. Kid Sounds.
- Kriske, J., & DeLelles, R. (2011). *Game plan K: An active music curriculum for children*. Kid Sounds.
- Laban, R. von, & Ullmann, L. (1988). *The mastery of movement* (L. Ullmann, Ed.; 4th ed.). Northcote House.
- Lange, D. M. (2013). Integrating music learning theory with the Orff approach. *The Orff Echo*, 45(2), 22–27.
- Lasko, J. (2016). Setting a framework for children's improvisation and choreography. *The Orff Echo*, 48(3), 26–29.

- Liao, M., & Davidson, J. W. (2016). The effects of gesture and movement training on the intonation of children's singing in vocal warm-up sessions. *International Journal of Music Education*, 34(1), 4–18. https://doi.org/10.1177/0255761415614798
- Lyman, P., Feierabend, J. M., & McNamara, D. (Directors). (2003). *Move it!* [Video]. GIA Publications.
- Lyman, P., Feierabend, J. M., & McNamara, D. (Directors). (2008). *Move it 2!* [Video]. GIA Publications.
- McVee, M. B., Ortlieb, E., Reichenberg, J., & Pearson, P. D. (Eds.). (2019). *The gradual release* of responsibility in literacy research and practice. Emerald Publishing Limited.
- Mercado, E. M. (2021). Preservice music educators' perceptions of in-person and asynchronous online fieldwork experiences. *Journal of Music Teacher Education*, 31(2), 1–14. https://doi.org/10.1177/10570837211061291
- Merriam, S. B., & Tisdell, E. J. (2015). *Qualitative research: A guide to design and implementation*. John Wiley & Sons, Incorporated.
- Metz, E. (1989). Movement as a musical response among preschool children. *Journal of Research in Music Education*, *37*(1), 48–60. https://doi.org/10.2307/3344952
- National Center for Education Statistics. (n.d.). *Common Core of Data (CCD)*. National Center for Education Statistics. Retrieved January 7, 2023, from https://nces.ed.gov/ccd/tables/201920_Virtual_Schools_table_3.asp
- Paniagua, A., & Istance, D. (2018). Teachers as designers of learning environments: The importance of innovative pedagogies. OECD Publishing. https://doi.org/10.1787/9789264085374-en

- *Remote instruction in emergency conditions FAQ.* (2022). http://www.nysed.gov/edtech/remoteinstruction-emergency-conditions-frequently-asked-questions
- Reynolds, A. M. (2005). Guiding preparatory audiation: A moving experience. In M. Runfola &
 C. C. Taggart (Eds.), *The development and practical application of music learning theory* (pp. 87–100). GIA Publications.
- Rhea, D. J. (2011). Virtual physical education in the K-12 setting. *Journal of Physical Education, Recreation & Dance*, 82(1), 5–50.

https://doi.org/10.1080/07303084.2011.10598551

- Rose, S. E. (1995). The effects of Dalcroze eurhythmics on beat competency performance skills of kindergarten, first-, and second-grade children (Publication No. 9531852) [Doctoral dissertation, The University of North Carolina at Greensboro]. ProQuest Dissertations & Theses Global
- Ruthmann, S. A., & Hebert, D. G. (2012). Music learning and new media in virtual and online environments. In G. E. McPherson & D. G. Hebert (Eds.), *An Oxford handbook of music education, volume 2* (Vol. 2, pp. 254–272). Oxford University Press.

10.1093/oxfordhb/9780199928019.013.0037

- Saldaña, J. (2021). The coding manual for qualitative researchers. SAGE Publications.
- Seitz, J. (2005). Dalcroze, the body, movement and musicality. *Psychology of Music*, *33*(4), 419–435.
- Sims, W. L. (1985). Young children's creative movement to music: Categories of movement, rhythmic characteristics, and reactions to changes. *Contributions to Music Education*, 12, 42–50. https://www.jstor.org/stable/24127425

- Singer, N. (2021, April 13). Online schools are here to stay, even after the pandemic. New York Times. https://www.nytimes.com/2021/04/11/technology/remote-learning-onlineschool.html
- Spurgeon, A. L. (2005). *Waltz the hall: The American play party*. University Press of Mississippi.

Stake, R. E. (1995). The art of case study research. Sage Publications.

Swanson, B. R. (1969). Music in the education of children (3rd ed.). Wadsworth Pub. Co.

Taggart, C. C. (2016). Music learning theory: A theoretical framework in action. In C. R. Abril & B. M. Gault (Eds.), *Teaching general music: Approaches, issues, and viewpoints* (pp. 183–208). Oxford University Press.

https://doi.org/10.1093/acprof:oso/9780199328093.001.0001

- The Feierabend Association for Music Education. (2022). *About FAME*. Feierabend Association for Music Education | A Tuneful, Beatful, Artful Learning Community. https://www.feierabendmusic.org/about/
- The Gordon Institute for Music Learning. (n.d.). *About GIML Professional Development Levels Courses – GIML – The Gordon Institute for Music Learning*. Retrieved December 30, 2022, from https://giml.org/pdlc/about/
- The Moververse (Director). (2020a, May 12). *Cha cha wiggle* | *kids dance* | *little movers latin & ballroom* | *children's tutorial* [Video]. https://www.youtube.com/watch?v=bsKyforF7hI
- The Moververse (Director). (2020b, May 12). *Waltz for kids* | *kids dance* | *little movers latin & ballroom* | *children's tutorial* | *waltz for kids* [Video]. https://www.youtube.com/watch?v=5b7WCxf0Cdc

- Urista, D. J. (2016). *The moving body in the aural skills classroom: A Eurhythmics based approach*. Oxford University Press.
- van der Merwe, L. (2015). The first experiences of music students with Dalcroze-inspired activities: A phenomenological study. *Psychology of Music*, *43*(3), 390–406. https://doi.org/10.1177/0305735613513485
- Weikart, P. S. (2003). Teaching movement & dance: A sequential approach to rhythmic movement (5th ed., rev.expanded). High/Scope Press.
- Zachopoulou, E., Tsapakidou, A., & Derri, V. (2004). The effects of a developmentally appropriate music and movement program on motor performance. *Early Childhood Research Quarterly*, *19*(4), 631–642.

APPENDIX A: FIRST INTERVIEW QUESTIONS

- 1. How is movement used in your classroom?
- 2. Does it vary per grade level?
- 3. Is the inclusion of movement consistent or unit/activity-based?
- 4. What resources do you use to plan movement-based lessons?
- 5. Can you provide an example of how you have used movement in your classroom?
- 6. What are the benefits you have observed from including movement in your classroom?
- 7. What holds you back from including movement in your lessons?
- 8. How do you assess the effectiveness of movement?
- 9. Do you have specific examples of how you incorporate movement in your lessons?
- 10. What would you like to add regarding the use of movement in the virtual elementary music classroom that I have not asked?

APPENDIX B: SECOND INTERVIEW QUESTIONS

- 1. What Folk Songs did you use which included movement in your virtual lesson?
- 2. What were your classroom procedures so movement successful in your lessons?
- 3. How did you assess if the students completed your asynchronous lessons?
- 4. Was the movement material from your asynchronous lessons included in synchronous classes?
- 5. How did you use movement to teach the concept of melody in your virtual lessons?
- 6. How did you use movement to teach the concept of dynamics in your virtual lessons?
- 7. How did you use movement to teach the concept of tempo in your virtual lessons?
- 8. How did you use movement to teach the concept of form in your virtual lessons?
- 9. How do you use movement to teach the concept of texture or timbre in your virtual lessons?
- 10. Do you have any further examples of how you included movement when you taught concepts, like dynamics, tempo, etc.
- 11. What are movement concepts or vocabulary did you wanted all students in your virtual classes to know?
- 12. Going with the definition of locomotor means move in your space, and non-locomotor means move in your place, how would you include locomotor movement in lesson activities?
- 13. How would you include non-locomotor movement in your lessons?
- 14. What formative assessment would you use to measure if the movement in your lessons is successful?
- 15. Would you use the chat or poll function to give feedback on how they were feeling with movement activities or to offer movement activity suggestions?
- 16. What expectations did you present to students that made them understand that movement was part of class and they were expected to participate?
- 17. If you could mentor a fellow elementary educator who is going to be teaching virtually, how would you aid them in including movement in their virtual lessons?

APPENDIX C: JOURNAL REFLECTION QUESTIONS

- 1. What movement activities did you do when teaching in-person that translated to when you were teaching virtually? Meaning, an activity that you used previously when teaching in-person and were able to adapt it for virtual instruction.
- 2. How would students move creatively in your virtual lessons?
- 3. What support or professional development would have helped you include movement in your virtual lessons?

APPENDIX D: FOCUS GROUP QUESTIONS

- 1. Please share a brief introduction and your experience as a virtual teacher.
- 2. What was an example of how using movement in your virtual lesson positively affected your students?
- 3. Which grade levels were the easiest and most challenging to include virtual movement activities?
- 4. What was your top resource you used for including movement in your virtual lessons?
- 5. What is the best way to assess if the movement you choose for your virtual lessons was effective?
- 6. What were some challenges you faced as a virtual elementary music educator?
- 7. What is an example of how using movement brought joy into your virtual lesson?
- 8. How did your professional development in the Orff-Schulwerk approach, Music Learning Theory, the Kodály method, Feierabend, Dalcroze Eurhythmics or other approaches influence how you included movement in your virtual lessons?
- 9. What movement props were most well received by your students and how did they use them?
- 10. What are ways that you incorporated student lead movement in your virtual lessons?
- 11. What would you like to add regarding the use of movement in the virtual elementary music classroom that I have not asked?

APPENDIX E: SOCIAL MEDIA RECRUITMENT POST

My name is Kelly A. Poquette, and I am exploring the use of movement in virtual elementary music education for my dissertation as a Ph.D. candidate at the University of North Carolina Greensboro. I am seeking participants who taught elementary music for a virtual school during the 2021-2022 school year. Data will include two interviews, a focus group, submitting two written lesson plans, and a written reflection to address two questions. The interviews will be 30-60 minutes, and the focus group will last 60 minutes. When my dissertation is complete, there is a \$250 honorarium for all selected participants who complete the study. Please take some time to consider if you would like to be involved. If you are interested, please comment on this message or DM me, and I will send you a Google Form to gather some information to see if you would be a good fit. I appreciate your consideration!

APPENDIX F: RECRUITMENT EMAIL

Dear Faculty,

My name is Kelly A. Poquette, and I am exploring the use of movement in virtual elementary music education for my dissertation as a Ph.D. student at the University of North Carolina - Greensboro. I am seeking participants who taught elementary music for a virtual school during the 2021-2022 school year. Data would include two interviews, a focus group, submitting two written lesson plans, and a written reflection to address two questions. The interviews will be 30-60 minutes, and the focus group will last 60 minutes. When my dissertation is complete, there is a \$250 honorarium for all selected participants who complete the study. Please take some time to consider if you would like to be involved. If you are interested, please send me a message to kapoquette@uncg.edu, and I will send you a Google Form to gather some information to see if you would be a good fit. I appreciate your consideration!

Respectfully,

Kelly A. Poquette

APPENDIX G: IRB EXEMPTION

Date: 1-22-2023

IRB #: IRB-FY22-592 Title: The Use of Movement in Virtual Elementary Music Education Creation Date: 4-18-2022 End Date: Status: Approved Principal Investigator: Kelly Poquette Review Board: UNC-Greensboro IRB Sponsor: Sponsor Not Found

Study History

Submission Type Initial	Review Type Exempt	Decision Exempt

Key Study Contacts

Member Tami Draves	Role Co-Principal Investigator	Contact tjdraves@uncg.edu
Member Kelly Poquette	Role Principal Investigator	Contact kapoquette@uncg.edu
Member Kelly Poquette	Role Primary Contact	Contact kapoquette@uncg.edu