IMPROVISATION IN THE BEGINNING CHORAL REHEARSAL

by

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ABSTRACT

The purpose of this study was to explore the musical achievements and experiences of fifth- and sixth-grade students improvising in a choral setting. The research questions that guided this mixed-methods study were: (a) Does improvisation have an effect on students' intonation, rhythm, blend, and phrasing in choral singing? and (b) Does the implementation of improvisation activities affect students' experiences in choir?

Using purposive sampling, I split my beginner fifth- and sixth-grade choir (N=36) into two equal groups, "traditional" (n=18) and "improvisational" (n=18). Both groups were taught the same piece of choral repertoire. Group A (traditional) was taught through a traditional choral model while group B (improvisational) received similar instruction with an added element of improvisation. Quantitative data were collected from rating scale scores of pre- and post-test audio recordings of the two groups. Two expert judges rated the performances using a Likert-type rating scale. Qualitative data sources were student journals (primary source), teacher-researcher journal, and focus group interviews. I used a conventional content analysis approach, allowing themes to emerge from data sources.

Results from this study led to the conclusion that using improvisation in choral rehearsals has a positive effect on musical achievement, specifically blend in choral singing, as well as student experience. Chorus teachers should consider implementing

improvisation as a way of engaging higher order thinking in music, increasing student

and ensemble musicianship, and engaging students in the learning process.

Chapter 1

INTRODUCTION

Since the early 1900s, music education in public schools has used the model of large performance-based ensembles as its foundation. This model has remained nearly unchanged for over a century (Adams, 2016; Kratus, 2007; Williams, 2011). Within this model, the teacher is often making all musical and creative decisions, leaving little room for students to be creative themselves. On the other hand, teachers implementing creative activities within these ensembles will give students the opportunity to develop creative expression, leading to a more student-centered environment (Norgaard, 2017). Specifically, incorporating improvisation into the choral rehearsal has the potential to increase connection and communication among members of a large ensemble as well as increase musicianship of singers (Ott, 2015). Azzara (2008) stated, "with the musicianship acquired through improvisation, members of your choir will have ownership of the music they are singing. The balance, blend, and intonation of the chorus will improve greatly as the singers continue to develop their musicianship" (p. 238). More research is necessary on the effects of incorporating improvisation into the choral rehearsal in regard to both the impact it may have on singing achievement and how it may affect students' experiences within these ensembles.

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Statement of the Problem

While many choral teachers recognize the importance of incorporating improvisation into rehearsal time, it is rarely used in the process of learning repertoire (Hickey, 2012; Langley, 2018). Many researchers and music educators have written articles about the qualities of a successful elementary school chorus and rarely, if ever, addressed improvisation or any creative activities (Broeker, 2006; Chivington, 1998; Wilson, 2003). This may be largely associated with the priority ensemble teachers put on performance (Freer, 2010; Langley, 2014; Williams, 2011).

In the 2014 Music Standards (National Association for Music Education, 2014), creativity is listed as one of the four core processes--- alongside performing, responding, and connecting. "The standards emphasize conceptual understanding in areas that reflect the actual processes in which musicians engage" (SEADAE, 2014, p. 4). For those following these Standards, it could be expected that creativity be implemented in all forms of music education. According the National Association for Music Education (NAfME) (2018), "Students need to have experience in creating, to be successful musicians and to be successful 21st century citizens." However, improvisation is often not considered a core musical skill of many public choirs with choirs typically bounded by printed notes (Bell, 2004). Yet, the benefits of improvisation on students' musicianship have been noted by many researchers (Azzara, 1993, 2005, 2008; Gordon, 2003; Hickey, 2012; Kratus, 1991). Though some research exists on improvisation in instrumental ensembles (Azzara, 1993; Snell,

2006; West, 2015), there is a paucity of research addressing improvisation in choral ensembles.

Purpose of the Study

The purpose of this study was to explore the musical achievement and experiences of fifth- and sixth-grade students improvising in a choral setting.

Research Questions

The research questions that guided this study were:

a. Does improvisation have an effect on students' intonation, rhythm, blend, and phrasing in choral singing?

b. Does the implementation of improvisation activities affect students' experiences in choir?

Significance of the Study

Within the current model of music education in the United States, most middle- and high school students only have an opportunity for music instruction through participation in large ensembles. This leads to a large emphasis on Western classical performance traditions, often at the sake of additional enriching musical experiences for students. If ensemble teachers are primarily concerned with performance and are not seizing the opportunity for students to create music, they may be depriving their students of a holistic music education. Because of the lack of research on improvisation within choral settings, this study could have important implications for choral teachers regarding the benefits and/or drawbacks of teaching choral repertoire with improvisation as the foundation.

Chapter 2

REVIEW OF RELATED LITERATURE

Introduction

The purpose of this study was to explore the musical achievement and experiences of fifth and sixth graders improvising in a choral setting. This review of related literature highlights literature related to improvisation and the choral ensemble.

There is a growing number of researchers who have studied improvisation. In this review, I highlight literature that defines improvisation, and explores improvisation in elementary general music classrooms and instrumental ensembles. While literature on improvisation in the choral ensemble is limited, there have been a few studies on choral music educators' perceptions of creativity and improvisation that will be discussed. Therefore, I will address research regarding (a) rehearsal time usage of ensemble directors and (b) students' experiences in choir. By reviewing literature on both improvisation and the choral ensemble, I hope to provide a foundation for the current study.

Improvisation

Improvisation is the key to critical thinking in music and overall improvement of musicianship (Azzara, 2008). Defined as the manifestation of musical thought (Azzara, 2008), improvisation allows students to musically express their personal feelings, similar to conversation in language. Just as conversation becomes the readiness for learning to read and write printed symbols, improvisation becomes the

readiness for learning to read and write music notation (Gordon, 2003). For example, in a study of children's development of rhythmic music literacy, Burton (2017) noted that improvisation was "critical for children's comprehension of reading and writing music" (p. 17).

Audiation provides a foundation from which to improvise (Azzara, 2005, 2008; Burton, 2017; Burton & Snell, 2018; Conkling, 2005; Gordon, 2003; Shouldice, 2018). Audiation is "the hearing and understanding of music for which sound is not or may never have been physically present" (Gordon, 2003, p. 3). Audiation-based improvisation allows students to comprehend music in their minds prior to producing musical sounds within tonal and metric contexts (Shouldice, 2018).

"Though creativity and improvisation share a continuum, creativity is prepared composition while improvisation is spontaneous composition" (Gordon, 2003, p. 11). Azzara (2005) distinguished the difference between creativity and improvisation by stating that improvisation involves specific musical restrictions, whereas creativity is much more free. The musical guidelines for improvisation provide a framework for performers in regard to tonality, harmonic progression, meter, and form (Azzara, 2005).

Many researchers have identified benefits of incorporating improvisation into the music classroom. Kaschub (1997) noted that integrating improvisation into the performance classroom has a twofold benefit: (a) to help students understand the process that composers and performers use to create the music that students traditionally perform and (b) to involve students personally in the act of musical

creation for its own sake. Gordon (2003) wrote "the more a student engages in improvisation, the better that student will learn to listen to music, read music notation, interpret music, and perform music expressively" (p. vii). Similarly, Hickey (2012) gave six reasons why improvisation and composition should be incorporated into music curricula:

- Provide authentic and powerful ways to assess student knowledge

- Provide the most direct route to teaching musical concepts

- Provide a powerful means for ear training

- Provide a fun and creative vehicle for teaching notation

- Reveal otherwise untapped talents, often in our least suspected students

- Provide a unique "way in" and deeper understanding of music than would be reached through performing only (p.33).

Improvisation in Elementary General Music

Researchers have frequently studied how improvisation is implemented in elementary general music classrooms. Beegle (2010) examined and described children's music improvisations and interactions during weekly music classes. Participants were two classes of fifth-grade children (N=48). Each class was split into six groups of four. Students planned and performed music improvisations in response to three different prompts: a poem, a painting, and a musical composition. The research questions that guided Beegle's study were: (a) what is the relationship between children's social interactions and the products of improvising music?, (b) how do children respond to different prompts?, and (c) how do children express

strategies for improvising and values of what constitutes improvisation of sufficient integrity?

Beegle, the teacher-researcher, utilized multiple modes of data collection: individual written pre-observational questionnaires; transcribed audio- and video-recorded observations of children in the process of planning, improvising, and evaluating performances; the researchers' own audio-recorded and transcribed reflections and field notes; and individual and small-group interviews. Improvised performances were transcribed and analyzed according to timbral, melodic, rhythmic, and structural characteristic. Content analysis of transcribed focus group interviews and written field notes consisted of open-coding. Themes were marked in the field notes and transcriptions.

Beegle found that, as the children participated in planned improvisation, they gained skill in listening and performing in ensemble, communicating, group problem solving, decision making, and sharing improvisational techniques and musical ideas with one another. These skills are ones that are not only attainable in the general music classroom, but can and should be addressed in the choral ensemble.

Gruenhagen and Whitcomb (2014) explored the improvisational practices in elementary general music classrooms by surveying elementary general music teachers (N=103) throughout the United States. The researchers specifically looked at the nature of improvisational activities in the participants' classrooms, as well as the extent to which these activities took place. Unlike previous studies (Beegle, 2010), 90% of participants indicated that they had received training to teach improvisation.

Regardless of their training in improvisation, 58% indicated that they included

improvisation between 0% and 10% of their instructional time. While implementing

improvisation was not a priority in participants' instructional time, the majority of

teachers indicated that improvisation was necessary to the development of students'

musical skills and a tool to produce more independent thinkers and musicians. This

suggests that, though teachers hold improvisation at a high value, there is an apparent

lack of its implementation in the classroom.

Burnard (2002) recognized that the practice of improvisation is rarely seen in

school music programs. Burnard introduced a "Music Creators' Soundings Club" at a

local school in an effort to discover what improvising might come to mean to 12-year-

old children. Participants (N=18) were observed, listened to, and asked to reflect upon

the process of group improvisation. While the results of this study were not made clear

in the article, Burnard suggested music educators should

- approach improvisation as a process of musical interaction;

- assist children to be musically inclusive;

- exploit musical difference in musical ways; and

- use children's talk to reconstruct their experience (p. 169).

In this study, I utilized Burnard's suggestions as a way to support student's

improvisation and experience improvising.

Through an online questionnaire, Mynatt (2018) sought to discover the

curricular priorities of PK-5 general music teachers, including the proportion of time

spent on those skills they use in their music classrooms. Participants (N=96) were

general music teachers from across the United States. The online questionnaire
prompted teachers to indicate the activities they emphasized, per grade level, in their
music curricula, the methods they consulted for curricular planning, and the
percentage of time they spent teaching various musical skills. While findings indicated
that the most commonly consulted resource by participants was the 2014 Music
Standards, improvising/creating was only a small part of teachers' full music curricula.
With creating being one of the four core processes of the 2014 Music Standards,
shouldn't teachers be utilizing more improvisation and creating in their music
classroom? Though this study yielded a low response rate (3.79%), findings about the
limited priority of improvisation in the classroom are congruent to other research
(Gruenhagen and Whitcomb, 2014).

Improvisation in Instrumental Ensembles

Some researchers have examined the influence of improvisation on
instrumental music achievement (Azzara, 1993; Snell, 2006). Azzara (1993)
developed and examined the effects of an improvisation curriculum that was designed
to improve the music achievement of elementary school instrumental students.
Participants (N=55) were fifth grade students from two elementary schools. An
experimental group and a control group were chosen from each school setting. Prior to
any students receiving instruction, the *Musical Aptitude Profile* (MAP) was
administered to measure music aptitude. Music aptitude is defined as student's
potential to learn music (Gordon, 2003). The *Musical Aptitude Profile* (MAP) was

designed specifically to assess the music aptitude of fourth through twelfth grade students (Gordon, 2003).

Once pre-test data were collected, teaching began, with both the experimental and control groups receiving parallel instruction. Additionally, the experimental group received 10-15 minutes of improvisation performance activities designed by the researcher. Activities included learning repertoire by ear, developing a vocabulary of tonal and rhythm syllables, improvising with their voices and instruments tonic, dominant, and subdominant tonal patterns, as well as macrobeat, microbeat, division, elongation, and rest rhythm patterns.

At the end of the treatment period, all students performed three etudes written by the researcher. Performances were rated by four independent judges using a 5-point continuous rating scale for tonal, rhythm, and expressive criteria. The overall interjudge reliability was high (r=.94). Azzara found that the implementation of improvisation contributed to the improvement of fifth-grade students' instrumental music performance achievement. While this study did not measure the musical achievement of the ensemble as a whole, music educators can infer that individual musical improvement would strengthen the musical achievement of the entire ensemble.

In a similar study, Snell (2006) investigated the role of audiation-based improvisation in junior high instrumental music instruction. The researcher sought to: (a) describe the music achievement of junior high instrumental music students who were using an audiation-based improvisation curriculum; (b) investigate the

relationship between students' performance on the *Musical Aptitude Profile* (MAP) and their improvisation achievement; and (c) examine student perceptions of the meaningful and challenging elements of studying audiation-based improvisation. All students participating in the study took the *Musical Aptitude Profile* (MAP) at the beginning of the study. Teaching took place in small group lessons as well as a full ensemble every other day. Instruction included having students (a) sing and play the melodies by ear, (b) learn bass lines, (c) participate in tonal and rhythm pattern instruction, and (d) engage in improvisation using familiar and unfamiliar tonal patterns. To further implement improvisation, the teacher-researcher led students through seven improvisation skills (Azzara, 2008). Snell had students "(a) improvise rhythmically on the bass line of the tune, (b) perform four parts of the harmonic functions within the tune, (c) sing and play the harmonic rhythm of the tune, (d) improvise rhythm patterns to the harmonic progression using a neutral syllable, (e) improvise tonal patterns using macrobeats to the harmonic progression, (f) improvise tonal and rhythm patterns that fit within the harmonic progression, and (g) embellish the melodic material" (Snell, 2006, p. 21).

At the conclusion of the study, each student performed two familiar tunes along with an improvisation based on the musical contexts of each tune. Students were rated by four judges using a continuous and additive rating scale. Additionally, select students were interviewed about their perceptions of involving improvisation into the classroom. Snell found that student achievement and stabilized music aptitude had a strong correlation (r= .45-.89).

Students' feedback from interviews revealed that they enjoyed the process of learning to improvise. While some students felt uncomfortable singing in an instrumental setting, they understood how it helped their musicianship. The researcher concluded that improvisation is a meaningful aspect of instrumental curriculum and should be implemented more often by music educators. Additionally, Snell concluded that by using effective rating scales, teachers could identify musical differences and musical needs of their students, allowing teachers to teach effectively for each unique student.

Though this study took place in an instrumental setting, conclusions made by the research might be generalized to a choral setting. Additionally, though instruction in these studies (Azzara, 1993; Snell, 2006) took place in whole group instruction with individual student improvisation skills assessed, the present study will use whole group instruction and whole group assessment as a way to explore the effect of improvisation on the ensembles' intonation, rhythm, blend, and phrasing.

Improvisation in Choral Ensembles

Though the benefits of incorporating improvisation into music classrooms seem clear, improvisation is rarely addressed by choral directors (Bell, 2004; Ensley; 2015; Freer, 2010; Langley, 2018). To investigate the perceptions of students and teachers regarding the engagement of creativity within choral classes, Langley (2018) surveyed students and teachers across the Southern United States. A total of 314 middle and high school chorus students and 11 teachers completed the survey. Using the Measures of Creativity Perceptions Assessment (MCPA), participants were asked

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to rate their perceptions of the degree to which certain activities were creative. While most students found chorus to have creative activities, they could not provide examples of those specific creative activities. Student responses showed that improvisation was not a common part of the rehearsal. Rather, students rated 'singing printed music directed by teachers' as the most likely outlet for creativity. Similar to student responses, teacher participants rated composing and improvising as the least frequently occurring activities in rehearsals. While teacher participants claimed they valued creativity in the choral classroom, teachers attributed the limited use of improvisation in the classroom to a lack of confidence in implementing creative activities as well as the pressure of rehearsing for performance.

While Langley (2018) cited teacher participants as valuing creativity in the choral classroom, teacher participants in a study conducted by Ensley (2015) did not see value in implementing improvisation into the choral classroom. Ensley sought to investigate the prevalence of improvisation in middle and high school choral classrooms as well as to examine the factors that influenced its use. A survey using a 5-point Likert-type scale was sent to middle school (N=51) and high school choral directors (N=54) from 11 counties in central and northern Florida. Only 13 teachers completed the survey, yielding a small response rate, which the author does not draw attention to. Of those who participated, 57% indicated that they rarely used improvisation. 87% did not support the idea that improvisation could help students develop musically in a choral setting. Additionally, 77% did not consider improvisation an important skill for choral students to develop. Ensley attributed this

to the stigma that improvisation is exclusively linked to jazz. Gordon (2003) dismissed the idea that improvisation is exclusively taught in jazz ensembles, insisting that a student need not perform or sing in a jazz style to improvise (p. vii). Similar to Langley (2018), another common citing from teacher participants was the lack of resources, knowledge, and confidence to implement improvisation. While Ensley's (2015) results seem strong, the low response rate weakens the ability to generalize these findings to a larger population.

Hirschorn (2011) chose to explore the development of musical self-efficacy and musical self-image of young adolescent choral musicians engaged in a vocal improvisation program. Participants (N= 35) were sixth-grade choral students between the ages of 11 and 12 from a public middle school in a suburb of a Southeast US city. For the purpose of the study, musical self-efficacy was defined as "the conviction that one can successfully execute the behavior required to produce the outcome" (Bandura, 1997, p. 79). Musical self-image was defined as "having a sense of being a musical person" (O'Neill, 2007, p. 470).

The research questions that guided Hirschorn's study were: (a) how do adolescents, in a middle school choral program that values and develops musical creativity through vocal improvisation, manifest and describe their musical self-efficacy?, and (b) how do adolescents, in a middle school choral program that values and develops musical creativity through vocal improvisation, manifest and describe their musical self-image?

In this mixed methods design, students participated in vocal improvisation for 16 weeks. Quantitative data was collected using a Musical Self-Efficacy Survey instrument. The survey was administered five times throughout the process. Hischorn used the following qualitative measures: (a) interviews; (b) written reflections; and (c) participant and teacher/researcher field notes. Focus groups for interviews were selected based on the results of the first administration of the Musical Self-Efficacy Survey.

Throughout the 16 weeks, students participated in a variety of improvisation activities such as (a) call and response with teacher; (b) student echo of partner-sung patterns; (c) student call and response of partner-sung patterns; (d) choir echo of student-sung solo melodic patterns; (e) simultaneous group improvisation. Hirschorn also included vocal improvisation within a selection of choral repertoire.

Hirschorn analyzed the Musical Self-Efficacy Instrument for "reliability, overall musical self-efficacy development, efficacy source factor interaction, and improvisational efficacy development" (p.158). Focus group interviews, written reflections, and participant and teacher/researcher field notes were coded for themes. Hirschorn found that,

> Many participants desired creative freedom and found improvisation to be a worthy vehicle for exercising their creativity in music . . . improvisation allowed them to explore their creative voices, express their emotions through music, and fulfill their creative needs. (p. 153)

While this was the case for many student participants, Hirschorn also addressed the struggles of some students to confidently face the anxieties associated with vocal improvisation and were often hesitant to place themselves in vulnerable performance situations. Though these feelings of vulnerability are inevitable, Hirschorn urged music teachers to be persistent in daily implementation of improvisation as time and consistency are key. Similarly, Hirschorn stated that choral directors will encounter various levels of ability and efficacy. Hirschorn suggested weekly journal writing as a vehicle for establishing dialogue between teacher and student regarding their unique challenges and needs, which has inspired the incorporation of journaling into the present study. Finally, Hirschorn stressed that vocal improvisation not be treated as a curriculum unit with a definite beginning and ending. Rather, choral students should come to expect creative opportunities in every rehearsal.

The Choral Ensemble

This portion of the review of related literature will explore research regarding rehearsal time usage and students' experiences in the choral ensemble. The present study was designed to take place within a choral setting because of the lack of creativity being implemented in this setting (Brendell, 1996; Garrett, 2013; Hickey, 2012; Langley, 2018).

Next, I review research on rehearsal time usage and structure of choral directors to determine if improvisation is something that could be implemented within

these structures and rehearsal time. Since the present study also seeks to understand how student experience may be effected with the implementation of improvisation, I chose to highlight literature that has explored student experience in choir, both musical and personal.

Rehearsal Time Usage

Many researchers examined the use of rehearsal time in traditional choral settings. While there is a lack of research on rehearsal time usage for elementary choirs, there is a large amount of research on rehearsal time usage for high school choirs. Cox (1989) sought to determine the type of rehearsal organizational structure used by successful Ohio high school choral directors. Relationships between rehearsal structure and student attitude were also suggested. Cox used an explanatory observational design for this study. To increase reliability, Cox piloted the study with five high school choral directors. After piloting the study, Cox sent a questionnaire to choral directors, students, and administrators from 85 Ohio high schools. Of the 72 that responded, 12 were eliminated from data analysis due to incomplete returns. Therefore, the results of Cox's study consisted from responses from 60 qualifying schools.

Results showed that a majority of choral directors use the same rehearsal structure. Within this structure, directors place familiar and enjoyable musical activities at the beginning and end of rehearsal. The middle portion is devoted to detailed work on the literature being prepared. Regardless of rehearsal structure, the student participants indicated a positive attitude toward chorus. More information is

needed regarding what types of familiar and enjoyable musical activities are being used at the beginning and end of rehearsals and whether they involve student creativity. While this study examined the typical rehearsal structure of successful choirs, the present study will examine the effects of implementing improvisation into the daily rehearsal structure.

Brendell (1996) chose to examine how teachers used the initial minutes of high school choral rehearsals. Specifically, Brendell examined time use, rehearsal activity, and student off-task behavior within the initial minutes of 33 different high school rehearsals. Trained observers assisted in both in-class observations and analyses of videotapes. Interobserver reliability was strong (.93 for off-task behavior, .88 for activity coding, .85 for timing of activities).

Brendell's analysis of in-class observations and videotapes concluded that conductors averaged 43.45 elapsed seconds prior to the first verbal statement to begin and 14 minutes 19 seconds to begin rehearsal of literature. Observers looked at student off-task behavior during the entire choral rehearsal. Student off-task percentages were: getting ready, 26.14%; physical warm-up, 18.48%; other, 16.53%; literature instruction, 16.27%; vocal warm-up, 15.07%; sight-reading, 9.22%. Brendell concluded off-task behavior to be a function of the nature of rehearsals. The more active participation required for an activity, the less off-task students are. If chorus is traditionally teacher-directed, what does that mean for student involvement? By incorporating creative activities into choral rehearsals, students may become more engaged and have agency in their learning.

To explore rehearsal time spent using critical thinking in the choral ensemble, Garrett (2013) examined the relationship between time spent in non-performance and critical thinking activities in high school choral rehearsals. Research questions that guided this study were: (a) what percentage of rehearsal time is spent on student performance?, (b) what percentage of non-performance rehearsal time is spent by directors and students in activities focused on lower-order thinking skills, critical thinking skills, and non-instructional activities?, (c) what relationship exists between the total amount of time spent in non-performance activity and the amount of time spent developing students' critical thinking skills?, and (d) what relationship exists between students' level of school music experience and the percentage of time spent in developing students' critical thinking skills?

The three participants were public school teachers of high school choral music programs in a large, southern state. Garrett recorded a total of 18 rehearsal observations, six from each school. The observed rehearsal behaviors were coded into three categories of non-performance activities: lower-order thinking skills (e.g., *How many sharps are in G Major?*), critical thinking skills (reflective thinking about ensemble), and non-specific activities (off-task behavior, silence). Results showed that about half of rehearsal time was in student performance while the other half was in non-performance activities. The percentage breakdown of non-performance activities was: lower-order thinking skills, 45.96% (SD=8.25); critical thinking skills, 6.36% (SD=9.45); non-specific activities, 1.57% (SD=1.79). No significant correlation was

found between level of ensemble and time spent in activities requiring critical thinking skills.

Garrett's results clearly indicated the lack of improvisation being used as a way of addressing critical thinking. Garrett suggested that music educators could integrate improvisation and composition activities in general music and performance-based classroom environments as a way of incorporating critical thinking skills through music. Opportunities for musical creativity would "allow students to engage at the highest level of their cognitive processing hierarchy" (Garret, 2013, p. 314).

Students' Experiences in Choir

Researchers have also studied the musical and personal experiences of children in choral ensembles (Mizener, 1993; Parker, 2010; Pearsall, 2016; Sweet, 2010). Mizener (1993) examined the attitudes of elementary music students toward singing and choir participation in relation to grade level and gender, classroom singing activities, previous and current out-of-school singing experiences, and degree of singing skill (self-perceived and teacher-assessed). Participants (N=542) were third-through sixth-grade students from seven schools in a large, urban school district. Participants were sent a questionnaire that addressed singing interest, choir participation, classroom singing activities, out-of-school singing experiences, and self-perception of singing skill. Additionally, participants were audio-recorded singing "Jingle Bells" along with one familiar song of choice. The recordings were rated for singing accuracy.

Mizener concluded that as grade level increased, attitudes toward music and singing decline. Females were found to prefer singing in choir over boys. Mizener concluded that most students at all grade levels enjoy singing under certain circumstances, suggesting that music educators include opportunities to enhance positive attitudes for singers. No elements of creativity were listed in the classroom singing activities on the questionnaire sent to participants. Perhaps students' attitudes toward singing would not decline if choral teachers continued to put an emphasis on individual musicianship and creativity as students got older.

Parker (2010) studied student experiences of belonging within an urban high school choral ensemble. Participants (N=26) were tenth through twelfth grade students selected from one northeastern high school choral program in a large city in the USA. Data was collected through small-group, open interviews. Each interview group consisted of three to four students. The data obtained from the interviews were descriptively and analytically coded by the researcher. Five themes emerged: (a) choral experience as uncompetitive; (b) sectional bonding as social bonding; (c) singing as shared experience; (d) chorus as safe space; and (e) trips as pivotal bonding experiences. As a suggestion for future research, Parker suggested examining student belonging as part of choral teacher practices. In the present study, I will seek to examine student experiences as they relate to the implementation of improvisation.

Similar to Parker's (2010) suggestion, Pearsall (2016) explored students' experiences writing songs in an informal learning context situated in a choral setting. Participants (N=13) were students in grades four through eight at a progressive,

private school. Through analysis of video recordings, journals, field notes, photographs, documents from students, questionnaires, and group semi-structured interviews, Pearsall gained insight on each students' experience with this teaching practice. In this informal learning context, students encountered situations they would not have in a formal context, such as problems related to songwriting, social problems and performing original songs. Many students expressed that they enjoyed the independence they were given along with the ability for students to work together and support one another. Pearsall found that students enjoyed making music together. Pearsall stated "we must give our students a chance to create their own music, music that is meaningful and relevant to them, and valued in the choral classroom" (p. 182). Could improvisation have a similar effect on students' experience in choir?

Summary

Researchers support the traditional choral model as the primary model used by choral teachers in the United States (Arthur, 2002; Garrett, 2013; Langley, 2018). While researchers have identified clear benefits of improvisation on students' musicianship (Azzara, 1993, 2005, 2008; Gordon, 2003; Hickey, 2012; Kratus, 1991), choral teachers tend to teach with a performance-based mentality, providing little to no time for individual creativity and singing. Could the addition of improvisation in regular rehearsals help to achieve choral intonation and blend that is desired in performance? In addition, many choral teachers do not feel comfortable or have the resources they believe necessary to implement improvisation activities (Beegle, 2010; Ensley, 2015; Langley, 2018). Research is necessary that examines improvisation as a

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way of increasing personal and ensemble musicianship, and giving students more agency in their learning within a choral setting. Therefore, the purpose of this study was to explore the musical achievement and experiences of fifth- and sixth-grade students improvising in a choral setting.

Chapter 3

METHODOLOGY

Purpose of the Study

The purpose of this study was to explore the musical achievement and experiences of fifth- and sixth-grade students improvising in a choral setting.

Research Questions

The research questions that guided this study were:

a. Does improvisation have an effect on students' intonation, rhythm, blend, and phrasing in choral singing?

b. Does the implementation of improvisation activities affect students' experiences in choir?

Theoretical Framework

I approached this study through the perspective of Gordon's (2007) music learning theory. "Music learning theory provides teachers with a theoretical framework to help them understand how to prepare and structure learning so that they can provide their students with optimal learning environments" (Taggart, 2016, p. 185).

Music Learning Theory

Music psychologist Edwin Gordon developed Music Learning Theory (MLT) as an explanation of how we learn when we learn music (2007). The process of learning music is compared to the process of learning language (Gordon, 2003, 2007),

where improvisation is parallel to conversing in language. Improvisation allows for meaningful musical thought that makes sense within a tonal and rhythmic context (Azarra, 1993). Just as higher order thinking is critical in general education, higher order music thinking is critical in music education: improvisation.

Audiation. For the present study, I focused on audiation-based improvisation. Audiation is the foundation of MLT and improvisation. Audiation is "the hearing and understanding of music for which sound is not or may never have been physically present" (Gordon, 2003, p. 3). To understand what takes place as we audiate, Gordon developed eight types and six stages of audiation (Gordon, 2003). The eight types of audiation are shown in Table 1. While these types of audiation are not hierarchical, some may serve as the readiness for others.

Table 1

Types of audiation

Type		
1	**Listening to**	*Familiar or unfamiliar music*
2	**Reading**	*Familiar or unfamiliar music*
3	**Writing**	*Familiar or unfamiliar music from dictation*
4	**Recalling and performing**	*Familiar music from memory*
5	**Recalling and writing**	*Familiar music from memory*
6	**Creating and improvising**	*Unfamiliar music while performing or in silence*
7	**Creating and improvising**	*Unfamiliar music while reading*
8	**Creating and improvising**	*Unfamiliar music while writing*

Gordon, 2003, p. 14

For the present study, I focused on Types six and seven. Though Gordon stated that these types are not hierarchical, creating and improvising are crucial for music development because they allow students to demonstrate musical understanding. The six stages of audiation are shown in Table 2. While the types of audiation presented in Table 1 are not hierarchical, the six stages of audiation serve as a readiness for the next stage. The six stages in Table 2 are outlined as they occur in Type 1 (Listening) of audiation (Gordon, 2003).

Table 2

Stages of audiation

Stage	
1	Memory retention
2	Imitating and audiating tonal patterns and rhythm patterns and recognizing and identifying a tonal center and macrobeats
3	Establishing objective or subjective tonality and meter
4	Retaining in audiation tonal patterns and rhythm patterns that have been organized
5	Recalling tonal patterns and rhythm patterns organized and audiated in other pieces of music
6	Anticipating and predicting tonal patterns and rhythm patterns

Gordon, 2003, p. 18

Through development of audiation, students learn to understand music. Students are able to perform, read, write, compose, and improvise music with musical comprehension.

      Discrimination and inference learning. According to Gordon (1971), there are two types of learning: discrimination and inference. Discrimination learning is defined as,

> The lower of two generic types of skill learning. In discrimination learning students are taught skills, content, and patterns by rote. . . . Discrimination learning is the readiness for inference learning (Gordon, 2003, p. 364).

Inference learning is defined as,

> The higher of two generic types of skill learning. In inference learning students are guided by the teacher to learn skills, content, and patterns by teaching themselves. Students are not taught by rote in inference learning (Gordon, 2003, p. 368).

Based on Gordon's definitions of discrimination and inference learning, improvisation is a sub-category of inference learning. When improvising, students create music within the confines of tonality, meter, form, and style. All music learning that has happened before can be realized through higher order thinking through improvisation. I was interested whether this higher order thinking in music would influence choral singing, and if student agency will influence students' experiences in choir.

Participants

Participants (N=36) for this study were fifth- and sixth-grade chorus members at Firefly Intermediate School. Fifth and sixth graders were specifically chosen for this study, as researchers have identified a "developmental plateau" in musical creativity for students in fourth through sixth grade due to a shift toward performance-based ensembles in music education (Brophy, 1998; Kiehn, 2003). Therefore, in my study, I sought to embed creativity within an ensemble context with this specific age group.

In preparation to work with the students, I completed an online course by the Collaborative Institutional Training Initiative (CITI). The course was titled "Human Subjects Protections" (see Appendix E). Parent/caregiver consent and student assent forms were submitted to and approved by the University of Delaware Institutional Review Board (see Appendix D).

Role of the Teacher-Researcher

I served as the teacher-researcher. In this role, I established the control and experimental groups through purposive sampling, selected the repertoire for the choir, developed, planned, and facilitated weekly choral rehearsals, adapted the rubric for rating choral performance, as well as collected and analyzed data. Additionally, I kept my own journal throughout the study. In this journal, I documented my observation and reflections after rehearsals.

Rationale for Mixed-Methods Design

The purpose of this research was to gain a holistic understanding of how improvisation functions in a beginner choir rehearsal. A mixed-methods design was

used in this study, encompassing both quantitative and qualitative research. In an effort to define mixed methods research, Johnson, Onwuegbuzie, & Turner (2007) stated:

> Mixed methods research is an intellectual and practical synthesis based on qualitative and quantitative research . . . It recognizes the importance of traditional quantitative and qualitative research but also offers a powerful third paradigm choice that often will provide the most informative, complete, balanced, and useful research results (p. 129).

Because there is a lack of research on improvising in the choral setting, I chose a mixed-methods design to yield comprehensive results. Additionally, while performance ratings are valuable, student experience provided another powerful lens on the effects of improvisation instruction in the classroom.

Setting

This study took place at a charter school, specifically the intermediate building for grades four through six. The choir is split into two groups: fourth grade and fifth/sixth grade. For the purposes of this study, only the fifth-/sixth- grade choir members participated.

Rehearsals took place in the band room because there was no choir room in the school. The room was large and open, creating an ideal space for various formations and set-ups. On rehearsal days, I arrived at 7:30am to set-up the room. I placed chairs in two rows of ten in the shape of a horseshoe. This formation allowed me to see all students, and gave students the ability to see and hear other members in the choir.

Rehearsals were scheduled to begin at 7:45am, however, due to students arriving late, most rehearsals did not get started until 7:50-7:55am. Students left their belongings in the hallway leading to the band room. Once students entered the band room, they found a chair, typically sitting with close friends. There were no assigned seats for the purposes of this study.

Procedure

Two forms were sent home to fifth- and sixth-grade choir members at Firefly Intermediate School in December. Parents/caregivers received a consent letter (Appendix D) and students received an assent letter (Appendix E). Students who did not wish to participate in the study were still included in all activities, but were not included in data collection.

I divided the choir students into two equal groups (each group, n=18) using purposive sampling and rehearsed with each group separately for five weeks (four total rehearsals). Rehearsals were 40-45 minutes in length. Both the traditional group and the improvisational group learned the same piece of repertoire (Gray, 2015). Lessons used with the traditional group focused on traditional elements of the choral ensemble including voice building, written notation, and rote learning (Chivington, 1998). Lessons with the improvisational group also included voice building and rote learning, but I used improvisation as a way to teach repertoire. Lesson plans I used throughout this study are found in Appendix F.

Azzara (2008) presented a model for learning how to improvise. Using this model, I had students in the improvisational group

1. learn repertoire (melody and bass line);

2. learn patterns and harmonic progressions in the context and style of the repertoire; and

3. improvise melodic phrases over bass line.

I recorded both groups during their first rehearsal. After I rehearsed with each group for four weeks, the groups were audio-recorded again. I used the audio-recordings to explore the effect of improvisation on musical achievement, both between groups and within groups.

In addition, students were asked to keep a chorus journal for the four rehearsals. The final five to ten minutes of rehearsal were dedicated for students to write in their journals. The information gathered from these journals was used to explore the effect of improvisation on students' personal experiences in chorus. Both groups were given the same prompts to allow for comparison between groups.

To better understand students' experiences in choir and triangulate data, students were randomly selected as members of a focus group. Three students from each group (traditional and improvisational) were randomly selected. The interviews were separated by group. A group of three students from each group (traditional and improvisational) participated in an open group interview at the end of the study. This interview gave me more insight into students' experiences of improvisation in choral rehearsal. The interview questions were planned and reflected prompts from student journals.

Data Collection

Data were collected and triangulated through pre- and post-test audio-recordings, student journals, focus group interviews, and my own reflective journal.

Audio Recordings

To explore the effect of improvisation on choral singing achievement, I audio-recorded each choir singing at the first rehearsal and the last rehearsal. Judges used a Likert-type rating scale (Appendix A) to rate pre- and post-test recordings. My iPhone, specifically the app "Voice Memos," was used for the audio-recording. Prior to recording for data collection, I ran a sound check to ensure the device was working and that it was a strong representation of the entire group.

Journals

Student journals served as the primary source of qualitative data. I used journals to capture students' experiences in choir. Journals are particularly effective in capturing people's moods and most intimate thoughts, particularly when written under the immediate influence of an experience (Bogdan & Biklen, 2007). The last five to ten minutes of each rehearsal were dedicated time for students to write in their journals. Journal prompts emerged throughout the study's implementation. The prompts were as follows:

1. What is your favorite and least favorite thing about chorus?

2. What do you think your role is in chorus? Why do you come to chorus?

3. How is chorus going for you? Anything you would like me to know?

4. In your opinion, what is choir? What does it mean to you?

As the teacher-researcher, I also kept a journal. My journal entries were personal reflections from each days' rehearsal. Specifically, I wrote about the procedure of the rehearsals, how my procedure went, what I may have changed for the future, and how I believe the students felt about the rehearsal. My personal journal was used to support data found in student journals.

Focus Group Interviews

A focus group (N=3) from each group met for interviews after the study. Students were randomly selected from each group. I met with the focus groups separately for approximately 20 minutes during their lunch and recess time. These interviews allowed me to ask specific questions about students' experiences in choir. Interviews were recorded using Garageband (v.10.1.1) on my MacBook Air. I facilitated the discussions with questions similar to journal prompts:

1. Why did you join chorus?

2. What is your favorite activity in chorus and why?

3. What is your least favorite activity in chorus and why?

4. Do you think chorus is a place where you can be creative?

Participants in the traditional group focus group were Luke, Julie, and Grace (pseudonyms). Luke and Julie were in fifth grade, and Grace was in sixth grade. While Julie was in fourth grade choir the year prior, it was Luke and Grace's first year participating in choir. Luke and Julie were also members of the school band.

Participants in the improvisational group focus group were Lucy, Mia, and Addison (pseudonyms). All three students were in fifth grade. Mia and Addison were

members of fourth grade chorus the previous year. This was Lucy's first year in chorus. All three students were also members of the school band.

Data Analysis

Quantitative Data

At the completion of the study, two independent judges rated all four recordings (pre- and post-test for traditional and improvisational groups) using the Choral Singing Achievement Rating Scale (Appendix A). In an effort to increase reliability, recordings were played for judges in a randomized order so judges were unaware of which group they were listening to or whether the recording was pre-test or post-test. Once all rating scales were completed and collected, I analyzed data by calculating the mean score for each dimension of the rating scale. Percentages were computed and means were compared between and within groups

Qualitative Data

Student journals were the primary source of qualitative data collection. Throughout the study, students' recorded responses to journal prompts in their own choir journal (see Appendix G). I did not read journal responses until completion of the study. After all data were collected, I read through all journal responses one prompt at a time. After reading through all journal responses twice, I used content analysis. Content analysis allows researchers to sift through large amounts of data and is particularly useful for examining trends and patterns in documents (Stemler, 2001). I used sticky notes to document trends in words and phrases, allowing me to categorize themes as they emerged.

I used a similar process for secondary data sources: my personal journal and focus group transcripts. Focus group interviews were transcribed by Landmark Associates. Upon receiving transcripts, I followed along while listening to the audio-recording to confirm that there were no errors. Finally, I documented trends in words and phrases of my own journal and the focus group transcripts, seeing how these ideas supported or contradicted themes from student journals.

<div align="center">**Criterion Measures**</div>

Development of the Rating Scale

Choral adjudication forms typically address items such as diction, precision, dynamics, tone control, tempo, balance/blend, and interpretation (Cooksey, 1977; Stegman, 2009). The continuous rating scale used in the present study addressed the following dimensions: intonation, rhythm, blend, and phrasing. Each dimension has three, or fewer, descriptive criteria. Gordon (2002) suggested that judges should not be presented with more than five criteria. By presenting judges with excess criteria, their listening becomes inconsistent, and thus, reliability declines.

Norris and Borst (2007) found that interjudge reliability is stronger when using a more detailed and descriptive adjudication form. Similarly, Webster & Hickey (1995) concluded that explicit (versus implicit) rating scales were most reliable. Therefore, the rating scale being used in this study was written with clear expectations and language.

I originally created a continuous rating scale to use for this study. I asked three music educators to review the rating scale. I found that ratings were inconsistent

between the three music educators. After I facilitated a conversation about the rating scale, I decided to design a Likert-type rating scale.

Miceli (2008) developed a Choral Singing Achievement Likert-type rating scale for eighth grade solo vocal performance. I adapted the rating scale to fit the needs of this study. Specifically, the rating scale was adapted to better rate an ensemble rather than a solo performance (see Appendix A).

Judge Selection and Training

The expert judges used for this study were selected based on their experience with beginner choral singing and music education. Both judges were teachers who received a Bachelor of Music in Music Education. Judge A was in the process of completing a Master of Music in Choral Conducting and had experience working with middle school choirs and upper elementary students in a musical theater setting. Judge B taught elementary school music, including upper elementary school chorus.

I trained both judges simultaneously before they began evaluating the recordings for data collection. For their training, I reviewed a sample recording and filled out a rubric. I presented the judges with the recording and completed rubric, facilitating a discussion about each dimension of the rating scale. Then, I had both judges listen to a new recording and complete the rating scale. The recording was played three times to allow judges time to complete the rating scale. After completion, I collected all scores and calculated percent agreement between judges (67%). I facilitated another discussion with the judges about the areas of disagreement. The

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judges ended up agreeing with each other once they explained their reasoning for their rating.

Repertoire Selection

As the teacher-researcher, I chose the piece of repertoire for the study. "Will There Really Be a Morning?", based on a poem by Emily Dickinson, was composed by Ruth Morris Gray (Gray, 2015).

This song is written in two parts, but for the purpose of this study and its time limitations, I only taught one part to the choir. Because the song is in major tonality and duple meter, the experimental group improvised within this context. The range for singers is B3-C5, which falls within the range of fifth- and sixth-grade students (Phillips, 2014). Additionally, most of the pitches fall within D4-D5, the tessitura of fifth- and sixth-grade students. Tessitura is defined as "the comfort zones in which the majority of pitches should be located" (p. 100).

<div align="center">

Assumptions/Bias

</div>

This study took place during my second year as the choir teacher at Firefly Intermediate School. Additionally, I had one and a half years' experience teaching Kindergarten general music and four years' experience teaching early childhood music.

During my first year at Firefly Intermediate School, I was presented with challenges I wished to address in this research study. Though many students appeared to love to singing, I found a lack of enthusiasm about participating in school chorus to be discouraging to me as the chorus teacher. I wondered if there was more I could do

as the chorus teacher to make the process of learning repertoire more engaging for students and increase the number of students in choir. Therefore, I developed this research study to examine the effect of improvisation on choral singing achievement and student experience in a choir setting.

Limitations of the Study

This study was limited to four rehearsals with one week off in the middle of the study due to school closing for a national holiday. For reasons such as illness and transportation issues, not all students were present for every rehearsal. Due to weather-related school closings, focus groups met four weeks after chorus rehearsals for this study were over. Because I only taught at the school once a week and was not the primary music teacher in the building, any additional music instruction given during the time of this study could not be documented or controlled.

Chapter 4

QUANTITATIVE FINDINGS

The purpose of this study was to explore the musical achievement and experience of fifth- and sixth-grade students improvising in a beginning choral rehearsal. The research question that guided the quantitative phase of the study was: *Does improvisation have an effect on students' intonation, rhythm, blend, and phrasing in choral singing?*

Miceli (2008) developed a Likert-type rating scale for eighth grade solo vocal performance. For the purposes of this study, I adapted the rating scale to better evaluate an ensemble rather than a solo performance. To answer the specific research question, the rating scale addressed the following dimensions: intonation, rhythm, blend, and phrasing. The full rating scale is in Appendix A.

I audio-recorded each group twice for pre-test and post-test evidence. The audio-recordings were done using the app "Voice Memos" on my iPhone 7 Plus. Prior to collecting the recorded data, I ran a sound check of the ensemble to ensure the recording device was working and that the recordings would be an accurate representation of the group.

Two expert judges were selected for this study. The judges were selected based on their experience in music education, specifically with children's choirs. Both judges were teachers who received a Bachelor of Music in Music Education. Judge A

was in the process of completing a Master of Music in Choral Conducting and had experience working with middle school choirs and upper elementary students in a musical theater setting. Judge B taught elementary school music, including upper elementary school chorus.

The judges were trained how to use the rating scale. For their training, the judges were given three hearings of the groups' performance of "Will There Really Be a Morning?" (Gray, 2015). This was not the performance used for data collection, but rather a run through of the piece from the second rehearsal. I calculated percent agreement between judges (67%). Then, I facilitated a discussion about the rating scale and areas of disagreement. The judges understood the others' reasoning for providing certain ratings.

In an effort to increase reliability, judges were unaware of which group they were listening to or whether the recording was pre-test or post-test. Once all rating scales were completed and collected, I analyzed data by calculating the mean score for each dimension of the rating scale and calculating the percent agreement between judges. Means were compared between and among groups (see Tables 3-18 and Figures 1-6).

Intonation

I instructed the judges to asses three criteria regarding Intonation. Table 3 shows judges' individual scores, mean scores, and percent agreement for the traditional group Intonation pre-test.

Table 3

Pre-test traditional group intonation rating

Intonation	J1	J2	m	Agreement
The ensemble performed with a sense of tonality.	3	3	3	100%
The ensemble performed with accurate pitches.	2	2	2	100%
The ensemble sang in tune.	2	2	2	100%
Total	7	7	7	100%

Table 4 presents judges' individual scores, mean scores, and percent agreement for the improvisational group Intonation pre-test.

Table 4

Pre-test improvisational group intonation rating

Intonation	J1	J2	m	Agreement
The ensemble performed with a sense of tonality.	4	3	3.5	67%
The ensemble performed with accurate pitches.	3	3	3	100%
The ensemble sang in tune.	3	3	3	100%
Total	10	9	9.5	67%

Table 5 illustrates judges' individual scores, mean scores, and percent agreement for the traditional group Intonation post-test. The traditional group saw an increase in all criteria from pre-test to post-test.

Table 5

Post-test traditional group intonation rating

Intonation	J1	J2	m	Agreement
The ensemble performed with a sense of tonality.	4	4	4	100%
The ensemble performed with accurate pitches.	4	3	3.5	67%
The ensemble sang in tune.	3	3	3	100%
Total	11	10	10.5	67%

Table 6 shows judges' individual scores, mean scores, and percent agreement for the improvisational group Intonation post-test. The improvisational group saw an increase in all criteria from pre-test to post-test. Judge 1 rated the improvisational group with a perfect score.

Table 6

Post-test improvisational group intonation rating

Intonation	J1	J2	m	Agreement
The ensemble performed with a sense of tonality.	4	4	4	100%
The ensemble performed with accurate pitches.	4	4	4	100%
The ensemble sang in tune.	4	3	3.5	67%
Total	12	11	11.5	67%

Judges had the strongest agreement with their scores for the traditional group pre-test (100%). Judges had agreement of 67% for all the other Intonation ratings scales.

Figure 1 shows pre-test and post-test mean Intonation scores for the traditional and improvisational group. As seen in Figure 1, pre-test Intonation for the improvisational group was 2.5 points higher than the traditional group. Both groups saw an increase in Intonation total scores from pre-test to post-test. The traditional group had an increase of 3.5 points while the improvisational group had an increase of 2 points.

Figure 1   Intonation Pre-Test and Post-Test Total Scores
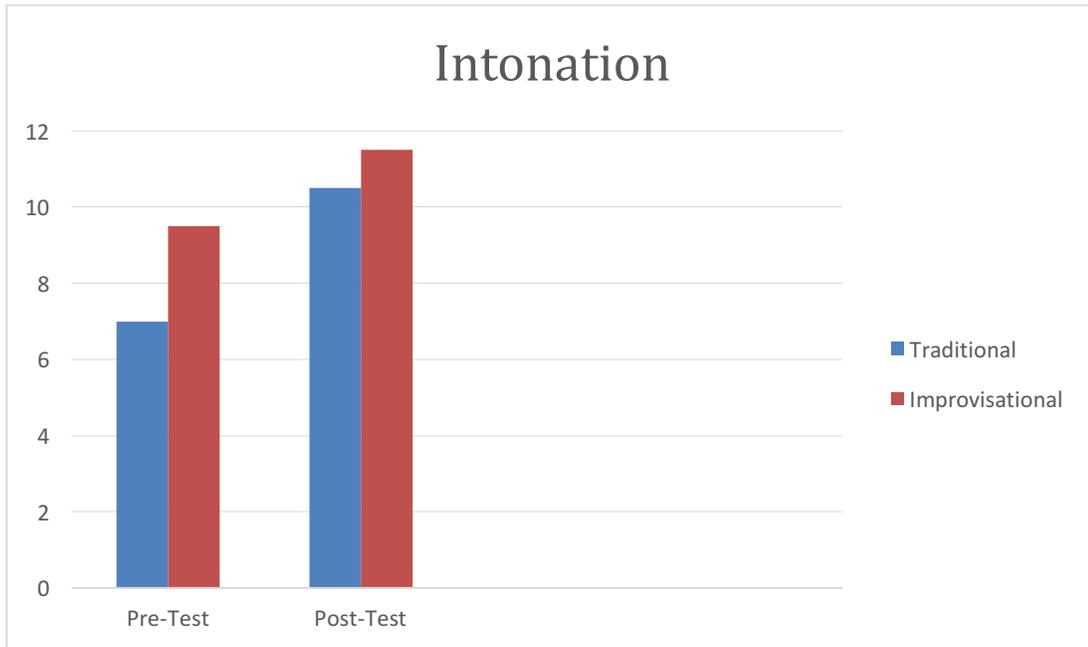
Rhythm

I instructed the judges to asses three criteria regarding Rhythm. Tables 7 displays judges' individual scores, mean scores, and percent agreement for the traditional group Rhythm pre-test.

Table 7

Pre-test traditional group rhythm rating

Rhythm	J1	J2	m	Agreement
The ensemble performed with a sense of meter.	4	3	3.5	67%
The ensemble performed with accurate rhythms.	4	3	3.5	67%
The ensemble performed with a steady beat.	4	4	4	100%
Total	12	10	11	33%

Table 8 presents judges' individual scores, mean scores, and percent agreement for the improvisational group Rhythm pre-test.

Table 8

Pre-test improvisational group rhythm rating

Rhythm	J1	J2	m	Agreement
The ensemble performed with a sense of meter.	4	4	4	100%
The ensemble performed with accurate rhythms.	4	3	3.5	67%
The ensemble performed with a steady beat.	3	3	3	100%
Total	11	10	11.5	67%

Table 9 illustrates judges' individual scores, mean scores, and percent agreement for

the traditional group Rhythm post-test. The traditional group had a decrease by 0.5

points for the ensemble sense of meter. However, there was an increase in the

ensembles' ability to perform accurate rhythms and perform with a steady beat.

Table 9

Post-test traditional group rhythm rating

Rhythm	J1	J2	m	Agreement
The ensemble performed with a sense of meter.	3	3	3	100%
The ensemble performed with accurate rhythms.	4	4	4	100%
The ensemble performed with a steady beat.	4	4	4	100%
Total	11	11	11	100%

Table 10 shows judges individual scores, mean scores, and percent agreement for the

improvisational group Rhythm post-test. Similar to the traditional group, the

improvisational group had a decrease by 0.5 points for the ensemble sense of meter.

Table 10

Post-test improvisational group rhythm rating

Rhythm	J1	J2	m	Agreement
The ensemble performed with a sense of meter.	4	3	3.5	67%
The ensemble performed with accurate rhythms.	4	4	4	100%
The ensemble performed with a steady beat.	4	4	4	100%
Total	12	11	11.5	67%

The judges had the strongest agreement for the traditional group post-test (100%) though the judges' weakest agreement was for the traditional group pre-test (33%). Judges had the same agreement rating for the improvisational group pre-test and post-test (67%).

Figure 2 shows pre-test and post-test mean Rhythm scores for the traditional and improvisational group. Based on mean pre-test data, the improvisational group started 0.5 points stronger on Rhythm than the traditional group. However, the traditional group scored higher by one point for their ability to perform with a steady beat. The total mean scores for rhythm (m=11, m=11.5) stayed the same from pre-test to post-test for both groups. Despite the totals staying the same, both groups saw a decrease in "sense of meter" from pre- to post-test.

Figure 2   Rhythm Pre-Test and Post-Test Total Scores
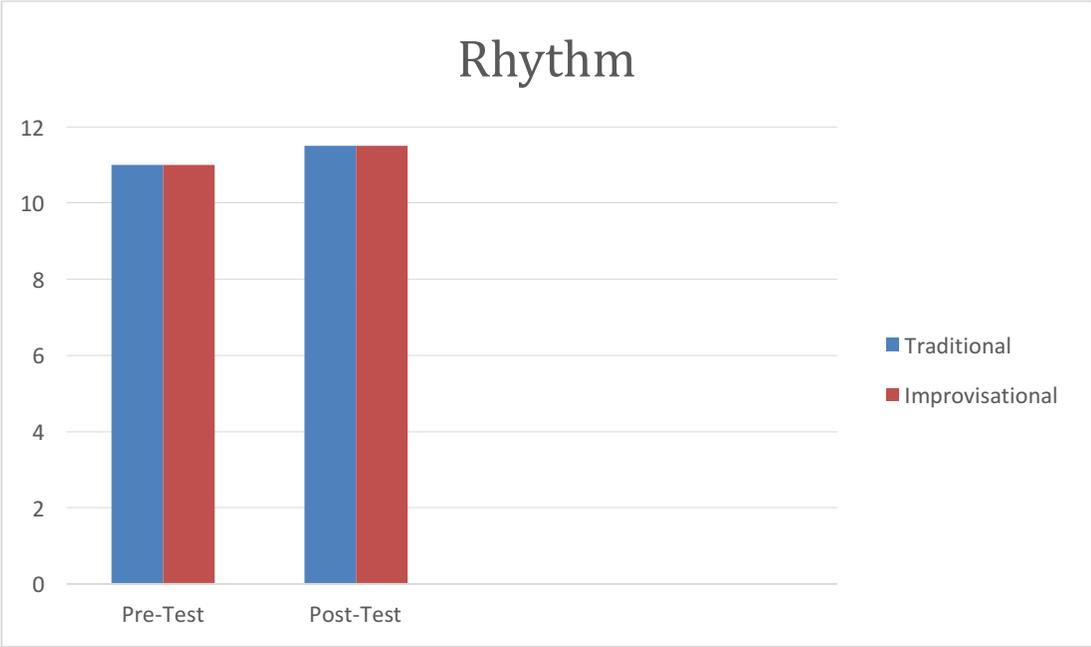
Blend

I instructed the judges to asses three criteria regarding Blend. Table 11 displays judges' individual scores, mean scores, and percent agreement for the traditional group Blend pre-test.

Table 11

Pre-test traditional group blend rating

Blend	J1	J2	m	Agreement
The ensemble sang with unified voices.	3	3	3	100%
The ensemble sang with uniform vowel production.	3	4	3.5	67%
The ensemble demonstrated supported breath control.	3	3	3	100%
Total	9	10	9.5	67%

Table 12 presents judges' individual scores, mean scores, and percent agreement for

the improvisational group Blend pre-test

Table 12

Pre-test improvisational group blend rating

Blend	J1	J2	m	Agreement
The ensemble sang with unified voices.	3	3	3	100%
The ensemble sang with uniform vowel production.	2	4	3	67%
The ensemble demonstrated supported breath control.	3	4	3.5	67%
Total	8	11	9.5	33%

Table 13 shows judges' individual scores, mean scores, and percent agreement for the traditional group Blend post-test. The traditional group had no change from pre-test to post-test.

Table 13

Post-test traditional group blend rating

Blend	J1	J2	m	Agreement
The ensemble sang with unified voices.	3	3	3	100%
The ensemble sang with uniform vowel production.	3	4	3.5	67%
The ensemble demonstrated supported breath control.	3	3	3	100%
Total	9	10	9.5	67%

Table 14 presents judges' individual scores, mean scores, and percent agreement for the improvisational group Blend post-test. The improvisational group had an increase in all criteria for Blend.

Table 14

Post-test improvisational group blend rating

Blend	J1	J2	m	Agreement
The ensemble sang with unified voices.	4	4	4	100%
The ensemble sang with uniform vowel production.	3	4	3.5	67%
The ensemble demonstrated supported breath control.	4	4	4	100%
Total	11	12	11.5	67%

Judges had 67% agreement for all Blend rating scales except the improvisational group pre-test. The improvisational group pre-test had a weak judge agreement (33%).

Figure 3 shows pre-test and post-test mean Blend scores for the traditional and improvisational group. Despite disagreements between judges, both groups scored the same (m=9.5) for their pre-test Blend rating. The traditional group saw no increase from pre-test to post-test, while the improvisational group saw an increase of 2 points.

Figure 3   Blend Pre-Test and Post-Test Total Scores
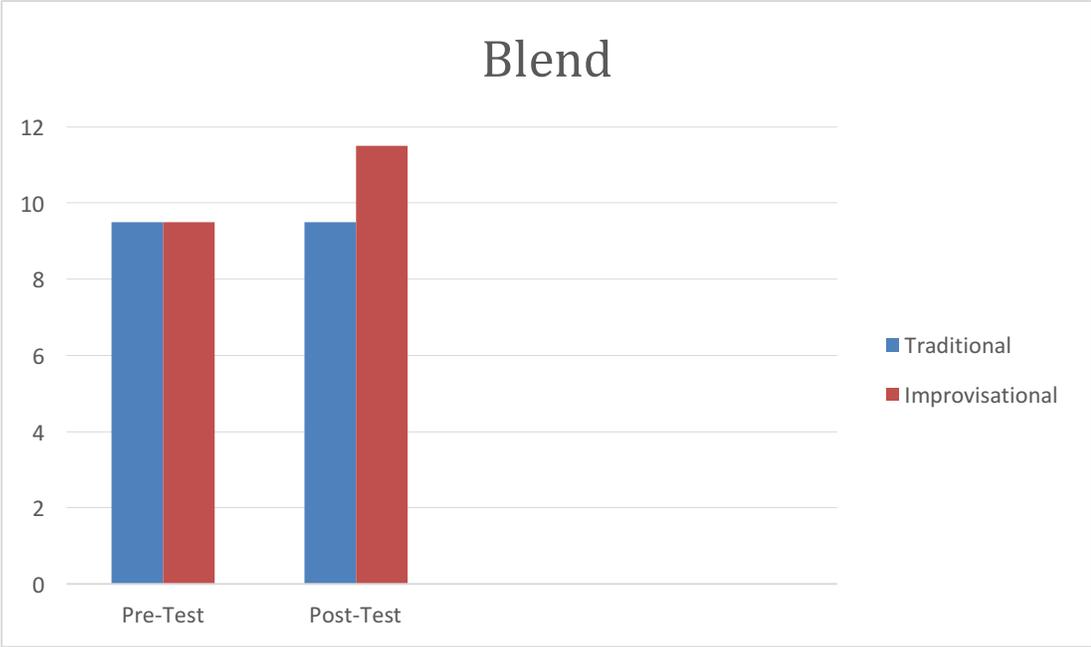
Blend

Phrasing

Unlike Intonation, Rhythm, and Blend, I had two criteria for judges to assess Phrasing. Table 15 displays judges' individual scores, mean scores, and percent agreement for the traditional group Phrasing pre-test.

Table 15

Pre-test traditional group phrasing rating

Rhythm	J1	J2	m	Agreement
The ensemble demonstrated the ability to shape phrases musically.	2	3	2.5	67%
The ensemble performed dynamics as indicated in the score, reflecting phrase structure.	2	2	2	100%
Total	4	5	4.5	67%

Table 16 displays judges' individual scores, mean scores, and percent agreement for the improvisational group Phrasing pre-test.

Table 16

Pre-test improvisational group phrasing rating

Rhythm	J1	J2	m	Agreement
The ensemble demonstrated the ability to shape phrases musically.	3	3	3	100%
The ensemble performed dynamics as indicated in the score, reflecting phrase structure.	3	2	2.5	67%
Total	6	5	5.5	67%

Table 17 illustrates judges' individual scores, mean scores, and percent agreement for the traditional Phrasing post-test. The traditional group had an increase for all Phrasing criteria.

Table 17

Post-test traditional group phrasing rating

Rhythm	J1	J2	m	Agreement
The ensemble demonstrated the ability to shape phrases musically.	3	3	3	100%
The ensemble performed dynamics as indicated in the score, reflecting phrase structure.	3	4	3.5	67%
Total	6	7	6.5	67%

Table 18 illustrates judges' individual scores, mean scores, and percent agreement for the improvisational group Phrasing post-test. The improvisational group had a small increase of 0.5 points.

Table 18

Post-test improvisational group phrasing rating

Rhythm	J1	J2	m	Agreement
The ensemble demonstrated the ability to shape phrases musically.	3	3	3	100%
The ensemble performed dynamics as indicated in the score, reflecting phrase structure.	3	3	3	100%
Total	6	6	6	100%

Judges had an agreement of 50% for all group ratings except the improvisational group post-test. The improvisational group post-test had a strong judge agreement (100%).

Figure 4 shows pre-test and post-test mean phrasing scores for the traditional and improvisational group. The improvisational group scored one point higher than the traditional group for pre-test phrasing. Post-test ratings show that the traditional group had an increase of 2.5 points while the improvisational group saw an increase of 0.5 points.

Figure 4   Phrasing Pre-Test and Post-Test Total Scores
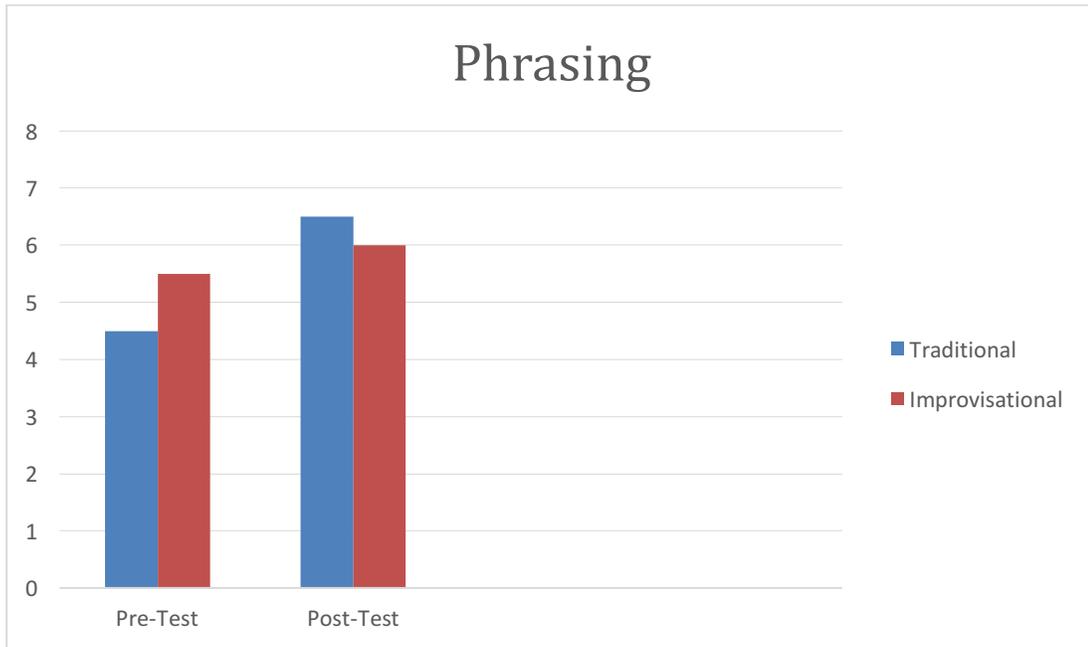
Summary of Traditional Group Pre-test and Post-test Data

Figure 5 is a bar-graph representing the pre-test to post-test results for the traditional group.

Figure 5   Traditional Group Pre-Test and Post-Test Ratings
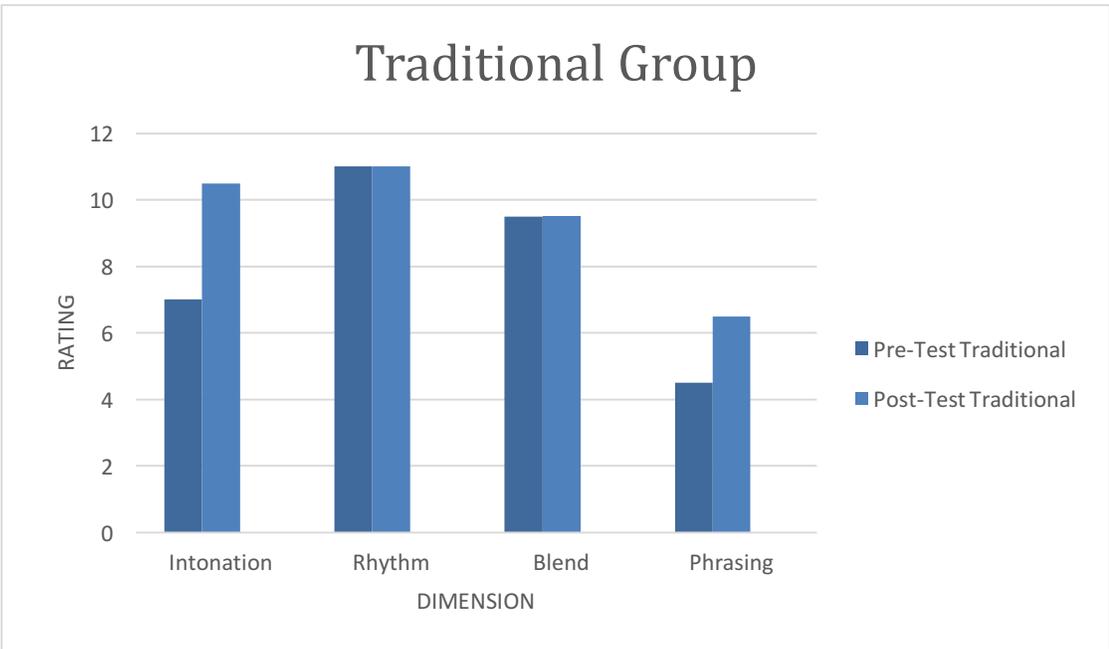
While the rhythm and blend dimensions remained the same from pre-test to post-test, the traditional group saw large increases in ratings for intonation and phrasing. Intonation total score increased by 3.5. The criteria with the largest increase for intonation was, "the ensemble performed with accurate pitches." This criterion had an increase of 1.5. Phrasing total score increased by 2 points. The criteria with the

largest increase for phrasing was, "the ensemble performed dynamics as indicated in the score, reflecting phrase structure." This criterion had an increase of 1.5 points.

Summary of Improvisational Group Pre-test and Post-test Data

Figure 6 is a bar-graph representing the pre-test to post-test results for the improvisational group.

Figure 6   Improvisational Group Pre-Test and Post-Test Ratings
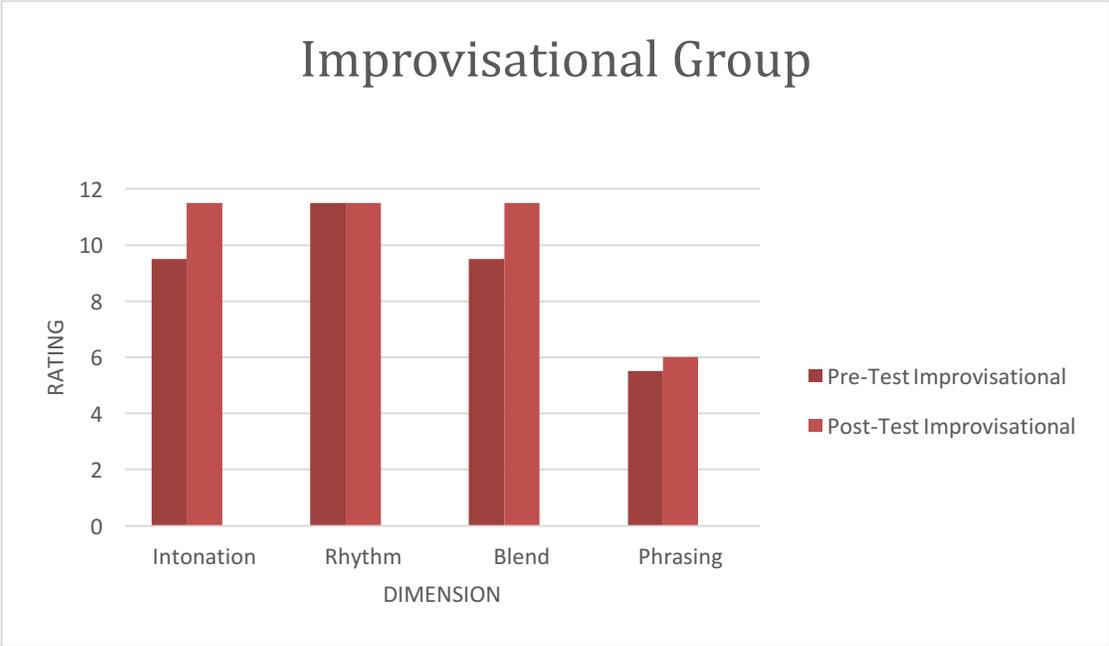
Of the four dimensions of the rating scale, the improvisational group had an increase in three (intonation, blend, and phrasing). Intonation total score increased by 2 points. The criteria with the largest increase for intonation was the same as the

traditional group: "The ensemble performed with accurate pitches." This criterion had an increase of 1 point. Blend total score increased by 2 points. The criterion with the largest increase for blend was, "the ensemble sang with unified voices." This criterion had an increase of 1 point. While phrasing increased, the total score only increased by .5 points.

While the mean total score for rhythm stayed the same from pre-test to post-test (m=11.5), there was an increase in criteria two and three: "The ensemble performed with accurate rhythms" and "The ensemble performed with a steady beat," but a decrease in criterion one: "The ensemble performed with a sense of meter."

Summary of Quantitative Data

Interrater reliability was calculated by percentages of agreement. Because there were only two judges, interrater reliability was inconsistent despite judge training. Interrater reliability for the traditional group (71%) ratings were slightly higher than the improvisational group (69%) ratings.

Pre-test data indicated that the improvisational group scored higher than the traditional group in three out of four categories. While attempts were made to evenly distribute ability levels between groups, it is possible that the improvisational group ended up with a stronger group of singers. Due to the possible sampling issues, it is critical to examine the differences from pre-test to post-test within the same group.

The traditional group saw large increases in ratings for intonation and phrasing. The total mean score for intonation increased by 3.5 points from pre-test (m=7) to post-test (m=10.5). Within the intonation dimension, the criteria with the

largest increase was the ensemble's ability to sing accurate pitches. The total mean score for phrasing increased by 2 points from pre-test (m=4.5) to post-test (m=6.5). Within the phrasing dimension, the criteria with the largest increase was the ensemble's ability to perform dynamics as indicated in the score.

The rehearsal procedures used with the traditional group may be used to explain the increases in these specific categories. For example, rehearsals focused on reinforcing pitches and rhythms of the same excerpt for four weeks. By doing so, students felt more comfortable with the pitches after multiple rehearsals as reflected in the scores. Additionally, rehearsals with the traditional group involved following along with the music. By following along with the score, the ensemble was able to focus on phrasing, specifically dynamics, by identifying them in the music. While students recorded the music without using the score, students may have begun to internalize the phrasing and dynamics after following along with the score itself.

The improvisational group saw increases in intonation, blend, and phrasing. The mean total score for intonation increased by 2 points from pre-test (m=9.5) to post-test (m=11.5). Similar to the traditional group, the criteria with the largest increase was the ensemble's ability to perform accurate pitches. The total mean score for blend increased by 2 points from pre-test (m=9.5) to post-test (11.5). The criteria with the largest increase was the ensemble's ability to sing with unified voices. The total mean score for phrasing did not have a large increase, increasing only 0.5 points from pre-test (m=5.5) to post-test (m=6.5).

Intonation and blend were the two dimensions that had a large increase for the traditional group. The rehearsal procedures used with the improvisational group may explain the significant increases within these specific categories. Rehearsals with the improvisational always began with an improvisation circle. During this activity, one student began a tonal ostinato. Students joined in one by one around the circle, layering in with either another tonal ostinato or rhythmic ostinato. As students became more comfortable with the activity, I encouraged them to focus on blending with the rest of the group and think about how their contribution might change the entire group sound. Additionally, rehearsals included improvising rhythmically on the chord roots of the excerpt and improvising new melodic material over the bassline. By doing so, students were actively engaging in listening and audiating. This value affirms findings from Beegle (2010), where students improvising gained skill in listening and performing in ensembles.

While the improvisational group did not have as large of an increase from pre-test to post-test, the group did see an increase as well as overall stronger ratings than the traditional group. These findings are consistent with Azzara (1993) and Snell (2006), where students who participated in improvisation had an increase in performance achievement.

In this chapter, I presented and interpreted quantitative data. In chapter 5, I will present and analyze findings from the qualitative phase of the study.

Chapter 5

QUALITATIVE FINDINGS

The purpose of this study was to explore the musical achievement and experience of fifth- and sixth-grade students improvising in a beginning choral rehearsal. The research question that guided the qualitative phase of the study was: *Does the implementation of improvisation activities affect students' experiences in choir?*

To answer this research question, I analyzed the following data sources: student journals, my journals, and focus group interviews. Student journals served as the primary source of data collection. Journal prompts emerged throughout the study:

1. What is your favorite and least favorite thing about chorus?

2. What do you think your role is in chorus? Why do you come to chorus?

3. How is chorus going for you? Anything you would like me to know?

4. In your opinion, what is choir? What does it mean to you?

My journal and the focus group interviews were used to support data found in student journals. Focus group interview questions were similar to journal prompts:

1. Why did you join chorus?

2. What is your favorite activity in chorus and why?

3. What is your least favorite activity in chorus and why?

4. Do you think chorus is a place where you can be creative?

Student journal responses were not read all data was collected. After all data were collected, I read through all journal responses one prompt at a time. After reading through all journal responses twice, I used a conventional approach to content analysis. In a conventional content analysis approach, researchers avoid using preconceived categories, instead allowing the categories and names for categories to flow from the data (Krippendorf, 1980).

I created a Microsoft Word document to keep track of specific words and phrases used for each individual journal prompt. The journal prompts were separated by traditional group and improvisational group response. After documenting this content on my computer, I used sticky notes to write down words and phrases that appeared often throughout each journal prompt. Using sticky notes allowed me to categorize themes as they emerged and sort ideas based on how they were related and linked.

A similar approach was used to analyze my own journal and the focus group transcripts. After establishing themes based on student journal responses, I read through my journal and the focus group transcripts to see whether these sources supported or contradicted any themes that had already emerged from student journal responses. I recorded quotes that were related to themes on a Microsoft Word document.

Validity

Creswell (2009) recommended using multiple strategies to check the accuracy of findings from qualitative data. In an effort to increase validity, I used triangulation

and an external auditor. I triangulated three different data sources: student journals, my own journal, and focus group transcripts. These three sources were used to build a reasoned justification for themes, adding to the validity of the study (Creswell, 2009).

An external auditor reviewed all the qualitative data. The person I selected was a second year graduate student who was familiar with qualitative analysis. This person read through all data and findings and confirmed that the themes found were accurate.

<div align="center">

Findings for Research Question Two

</div>

The following themes emerged during content analysis:

1. Singing with friends is fun!

2. Atmosphere

3. Discover your singing voice (and others'!)

4. Creativity

Theme One: Singing with friends is fun!

Regardless of the group in which students were placed, almost all students expressed a love of singing, especially in groups or with friends. After the first rehearsal, students were asked to write about their favorite part of chorus. Emily, participant of the traditional group, wrote on 1/8/19, "My favorite thing in chorus is that we get to sing in groups." James, also a participant of the traditional group, agreed saying, "My favorite thing about chorus is singing the songs with all the people in chorus." Maggie and Katie, participants of the improvisational group, recorded similar feelings in their first journal responses on 1/9/19. Maggie wrote, "My favorite thing about chorus is singing songs with my friends." Similarly, Katie wrote, "My favorite

thing about chorus is that the people and music are fun. I like hanging out with my friends and singing the different rhythms."

After the last rehearsal, students were asked to write, in their own opinion, "What is choir?" Sam and Taylor, participants in the control group, felt that choir was all about singing and having fun with friends. Sam wrote in her journal, "Chorus is a place where if you were even shy that you could make friends in chorus because you can meet anyone in here and you could sing and make friends in chorus." Taylor expressed similar feelings: "To me, choir is fun and about learning new things about music. I come to choir to sing with friends." Caitlyn and Jessica, participants in the improvisational group, felt similar to Sam and Taylor. Caitlyn wrote, "Choir is a fun place where a lot of people come together and sing. We sing, talk, and have fun at the same time." Jessica believed that, "Chorus is when a group of people come together to sing. People in chorus are able to learn from people around them and learn how to sing with a group of people." June, a quiet student from the traditional group, was particularly poignant in her journal prompt:

> Choir is a place where we sing with other people, as a family, have fun, learn, have opportunities, and experience. I love to sing, so choir is a happy place for me. I love choir and meeting new people, so I find this extremely entertaining.

The feelings that were apparent in student journals were confirmed by students in the focus group interviews. During the control group focus group, when asked "Why are you in chorus?", all students responded that they liked singing. Julie went on to specify that she enjoys singing in groups. Lucy, Mia, and Addison, participants in the experimental focus group, felt similarly to the control group. Lucy said, "I'm in

chorus because last year they said chorus was really fun and I like being with my friends and most my friends are in chorus."

Theme Two: Atmosphere

Many students in the improvisational group wrote or talked about the rehearsal atmosphere.

Engaging learning process. When improvisation was implemented with the experimental group, students were actively engaged in the learning process. Lucy, participant in the improvisational group, was excited to share her feelings about the process of learning "Will There Really Be a Morning?". Lucy shared that her favorite part was when students were asked to improvise new melodic material over the bassline. Addison agreed with Lucy stating, "That was awesome!" Lucy expanded upon this idea saying, "I feel like it helped you understand the music more." In regard to learning the bassline of the excerpt, Mia stated, "I liked those basslines because it helps you learn the music and the under part of it." In a study of the role audiation-based improvisation in junior high instrumental music instruction, Snell (2006) received similar student feedback. Students expressed understanding of how improvisation helped their musicianship. As the teacher-researcher, I had similar feelings to Lucy, Mia, and Addison. In my journal on 1/29/19, I wrote,

> Really great rehearsal today. Students are getting so much more comfortable with the improvisation circle in the beginning of rehearsal. I had them break into small groups to improvise new melodic material over the bassline. They LOVED this! . . . It was awesome. Once we went back and did just the excerpt, they were so confident.

Contrary to members of the improvisational group, some participants in the traditional group were bored throughout the learning process. In the traditional group focus group, when asked "What's your least favorite thing about chorus?", Julie said, "For some reason, I don't like learning the stuff. I just like getting it done, like fast, so like, if you just keep practicing, practicing…" I clarified what Julie meant by this in the following conversation,

> *Me*: "So the process of learning the songs, you don't love but once we actually
>
> have the song learned and we can run through the whole thing – that's what
>
> you enjoy the most?"
>
> *Julie*: "Mm-hmm."

I had similar feelings to Julie in regard to rehearsals with the traditional group. In my journal on 2/4/19, I wrote,

> Rehearsal was fine. Nothing too exciting. We ran through the excerpt a few times before recording it. The group sounds good, but rehearsals seemed boring especially compared to the other group.

Positive learning environment. Some students in the improvisational group expressed feelings of being in a positive, judgement-free environment. Chloe wrote after the first rehearsal on 1/9/19, "my favorite thing about chorus is that when I mess up a note, no one cares or judges. I also like the positive environment."

I referenced my own journal for the first rehearsal with the experimental group. On 1/8/19, I wrote:

> Students seemed to really like the improvisation game. They were nervous at first, but I made sure to stress the fact that there were no right answers. This seemed to make them more comfortable…

After the second rehearsal, I asked students to respond to the following prompt: "What do you think your role is in chorus?" Numerous students in the improvisational group wrote about doing their best. Rebecca wrote, "My role in chorus is to do my best at singing." Stephanie had similar feelings: "I think my job in chorus is to sing to the best of my ability."

During the third week, I chose to include a general question for students: "Anything else you would like me to know?" Louise expressed how fun the improvisation circle is in the beginning of rehearsal. She wrote, "I love it, and it makes me want to come."

Theme Three: Discover your singing voice (and others'!)

Rehearsals with the improvisational group always opened with an improvisation circle where one person would begin a tonal or rhythmic ostinato and students in the circle would layer in their own ideas one by one. Many students in this group wrote about this activity in their journals, specifically addressing the exploration of their own voice and others:

> To me, chorus is experimenting with your voice with your friends.
>
> Chorus is a place where people can sing freely and learn new things about their voice.
>
> Chorus is going great, and it is so fun to try new things with your voice.
>
> Choir is exploring your voice.
>
> Choir is somewhere where I go to sing. Also, to learn more about my own voice.

What I think choir is to explore different pitches of your voice and to also have fun doing it.

Chorus is a fun time to explore with your voice and to experience others' as well.

During the third rehearsal with the improvisational group, students were given time to improvise new melodic material over the bassline of the song in small groups. While students were working, I moved around the room to listen in on their improvisations and conversations that emerged. After the activity, I asked the entire group what it was like to improvise your own melody. When I referenced my journal from this day, I wrote: "One student excitedly said, 'Wow! I never knew Jodi could sing so low!'" The student, Jodi, responded with, "Me neither!" Students were excited about discovering new parts of not only their own voice, but other students. This finding is similar to Hirschorn (2011), who found that improvisation allowed students to explore their creative voices.

Theme Four: Creativity

Creativity was a common theme among students in the improvisational group. When asked "How is chorus going for you?" Avery wrote, "I think chorus is good. I am learning new ways to help me sing better. I especially like the improv. circle because you get to come up with your own melodies." Other students in the improvisational group felt similarly. Penelope wrote,

Chorus is going good for me and is always the highlight of my day. I want Ms. Harrington to know that I like when we do the ostinatos in the beginning and when she lets us create our own version of a melody like we did today.

Stella agreed, writing, "To me, choir is fun and about learning new things about music. I come to choir to sing with friends and create melodies and harmonies with many different sounds." Alley felt that the improvisation circle was a time to be creative: "Choir has been really fun so far. The thing we do with ostinatos are getting easier and are fun because we can be creative."

During rehearsal on 1/29/19, I prompted students to split off into small groups and improvise their own melodic material over the bass-line. Bailey wrote specifically about that rehearsal:

> My favorite thing about chorus today was the circle improv. game. It was fun to see what others would come up with… Today choir was awesome because we got to be really independent. We got to take a song line and change it how we saw fit. This was a good exercise because we could change our voice and also explore it.

Lucy, participant in the improvisational group focus group, verified her thoughts of creativity in choir:

> *Me:* Before we did all those sorts of things did you find that chorus was a place where you could really be creative or was it more those rehearsals that we did that let that side come out?
>
> *Lucy:* I feel like when we got to do more of the improv you could be more creative, but we were still having fun when we weren't doing the improv.
>
> *Me:* Okay. Right. It wasn't that chorus is boring and then we did this, and it totally changed everything, but you do feel like you were still able to have fun with the improv but be more creative.
> *Lucy:* Mm-hmm.

While students in the traditional group focus group thought choir was a place where you could be creative, they had a difficult time articulating how. This finding is similar to previous studies, where students felt that choir was a creative place but could not identify specific creative activities (Langley, 2018).

> *Me:* . . . Do you think chorus is a place where you can be creative?
>
> *Julie:* Mm-hmm.
>
> *Me:* How so, if you had to say?
>
> *Luke:* I feel like you can sing how you sing at home. Coz some people get embarrassed, like I do, get scared and nervous but people won't really judge you.
>
> *Me:* Mm-hmm.
>
> *Julie:* Because everyone's doing it.
>
> *Luke:* Yeah.

Summary of Qualitative Findings

Based on data collection and analysis, it became evident that the traditional group did not have much to say about their experience. While it doesn't appear there was any negative impact of traditional choral rehearsals on their experience, students in the traditional group did not provide substantial responses to the journal prompts.

On the contrary, the improvisational group provided me with a considerable amount of data to analyze. Because they were being exposed to a new choir rehearsal procedure, there was more for them to write about. Based on their journals and the improvisational group focus group, almost all students who participated in

improvisation expressed enjoyment with the activities. By implementing

improvisation into the choir rehearsal, students felt engaged in the learning process.

The environment was a positive one in which students felt comfortable exploring their

voice and creating new musical ideas that were exclusively their own.

Chapter 6

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The purpose of this study was to explore the musical achievement and experiences of fifth- and sixth-grade students improvising in a choral setting. The research questions that guided this study were:

a. Does improvisation have an effect on students' intonation, rhythm, blend, and phrasing in choral singing?

b. Does the implementation of improvisation activities affect students' experiences in choir?

Because there is a paucity of research on improvisation in a beginner choral rehearsal, I chose to implement a mixed-methods design to yield comprehensive results. Participants in this study were fifth- and sixth-grade members of chorus at a local charter school. Using purposive sampling, I split the chorus into two groups, traditional (N=18) and improvisational (N=18). Each group met separately for four rehearsals, learning the same piece of choral repertoire.

The traditional group was taught through a traditional choral model, focusing on choral warm-ups and enforcing repertoire through reading the score. The improvisational group used improvisation as a way to warm-up their voices and learn repertoire. The specific lesson plans I used with each group are found in Appendix F.

Quantitative Data Collection and Analysis

Quantitative data was collected through audio-recordings of the entire

ensemble. Audio-recordings were done using the app "Voice Memos" on my iPhone 7

Plus. Prior to recording for data collection, I ran a sound check.

After each groups' first rehearsal, they were recorded singing the choral

repertoire excerpt "Will There Really be a Morning?" (Gray, 2015). This recording

served as the pre-test. At the end of each groups' final rehearsal, they were recorded

again. This recording served as the post-test.

Two expert judges were selected to rate the recordings. The rating scale I used

for the study (Appendix A) focused on four dimensions: intonation, rhythm, blend,

and phrasing. In an effort to increase reliability, judges were unaware of which

recording they were listening to and rating. Once all rating scales were collected, I

calculated mean scores for each dimension. I also calculated percent agreement

between judges. To better understand the effect of improvisation on musical

achievement, I compared mean scores between and among the traditional and

improvisational group.

Quantitative Findings

Quantitative data was used to answer research question one: *Does*

improvisation have an effect on students' intonation, rhythm, blend, and phrasing in

choral singing?

The traditional group had the largest increase from pre-test to post-test for

intonation and phrasing. The mean of the total score for intonation increased by 3.5

points from pre-test (m=7) to post-test (m=10.5). The mean of the total for phrasing increased by 2 points from pre-test (m=4.5) to post-test (m=6.5). I attributed this to the rehearsal procedures with the traditional group. During their rehearsals, we focused on reinforcing pitches and rhythms of the same excerpt for four weeks. Therefore, it is understandable that their intonation had the largest increase from pre-test to post-test. Additionally, students in the traditional group used the music during rehearsals. This allowed me to facilitate conversations about dynamic markings the composer wrote in the music.

The improvisational group saw increases in intonation, blend, and phrasing. The mean of the total score for intonation increased by 2 points from pre-test (m=9.5) to post-test (m=11.5). The mean of the total score for blend increased by 2 points from pre-test (m=9.5) to post-test (11.5). The mean of the total score for phrasing was did not have a large increase, increasing by 0.5 points from pre-test (m=5.5) to post-test (m=6.5). Intonation and blend had the largest increase in points. These increases may be attributed to the rehearsals used with the improvisational group. Because rehearsals always began with an improvisation circle, students were immediately engaged in listening to others' voices and blend their own part within the texture. Additionally, all improvisation activities engaged students in listening and audiating.

Qualitative Data Collection and Analysis

Qualitative data were collected through multiple sources: student journals, my journal, and focus group interviews. Student journals served as the primary source of data collection, while my journal and the interviews were used as secondary data

sources to support themes that emerged from student journals. Journal prompts were as follows:

1. What is your favorite and least favorite thing about chorus?
2. What do you think your role is in chorus? Why do you come to chorus?
3. How is chorus going for you? Anything you would like me to know?
4. In your opinion, what is choir? What does it mean to you?

Focus group interview questions were modeled from the journal prompts:

1. Why did you join chorus?
2. What is your favorite activity in chorus and why?
3. What is your least favorite activity in chorus and why?
4. Do you think chorus is a place where you can be creative?

Qualitative data were analyzed using a conventional content analysis approach. In a conventional content analysis approach, researchers avoid using preconceived categories, instead allowing the categories and names for categories to flow from the data (Krippendorf, 1980). I read through all data at least two times prior to beginning content analysis. I used Microsoft Word and sticky notes to record my thoughts, and collect words and phrases that captured students' experiences in choir.

Qualitative Findings

A qualitative approach was used to answer research question two: *Does the implementation of improvisation activities affect students' experiences in choir?*

The following themes emerged from data analysis:

1. Singing with friends is fun!

2. Atmosphere

3. Discover your singing voice (and others'!)

4. Creativity

Students, regardless in which group they were, expressed enjoyment of singing with friends. For many students, this was the reason they chose to be in chorus. The learning atmosphere was frequently discussed by students. Students in the improvisational group experienced a positive environment and expressed enjoyment and engagement throughout the learning process. On the contrary, some students in the traditional group expressed boredom throughout the learning process. Discovering one's own voice as well as others' voices was a common theme among students in the improvisational group. Many students in the improvisational group wrote about exploring new parts of their voice as well as discovering unique qualities of other classmates' voices. Finally, creativity was a common theme among the improvisational group. Students enjoyed the independence that came with being able to create their own ostinato or melodic line.

Conclusions

The purpose of this study was to explore the musical achievement and experiences of fifth- and sixth-grade students improvising in a choral setting. After analyzing quantitative and qualitative data, I established the following conclusions:

- Using improvisation to teach choral repertoire had a positive effect on the musical achievement of beginner choral singers, particularly blend.

- Students participating in improvisation were highly engaged and enthusiastic during the process of learning repertoire. Implementing improvisation into rehearsal allowed students the opportunity to be independent and creative.

- Using improvisation to teach choral repertoire allowed students better to understand the harmonic structure of the music.

- Students participating in improvisation were given time to explore the various parts of their voice, which they would not have otherwise been given the opportunity to do.

Musical Achievement

Using improvisation in a choral rehearsal has a positive effect on the musical achievement of choral singers, particularly intonation and blend. From pre-test to post-test, the improvisational group in this study had the most significant increase for their blend. The traditional group saw no increase in this category. Beegle (2010) also found that fifth-grade students, when participating in small-group planned improvisation, gained skill in listening and performing in ensemble. This finding also affirms Azzara's (2008) statement that, "with the musicianship acquired through improvisation, members of your choir will have ownership of the music they are singing. The balance, blend, and intonation of the chorus will improve greatly as the singers continue to develop their musicianship" (p. 238).

Independent and Creative

Students enjoy being independent and creative. Improvisation provides musical independency and creativity for students. In this study, students in the improvisational

group expressed enjoyment when participating in improvisation activities that allowed them to try different musical ideas that were uniquely their own. Similarly, Pearsall (2016), who explored song writing in a choral setting, concluded that students expressed enjoyment of independency and making music with friends. While students in the traditional group seemed to think choir was a place where they could be creative, they had a hard time articulating what those creative activities were. This finding is similar to Langley (2018), whose student participants were also unable to identify specific creative elements of choir rehearsal. In the 2014 Music Standards, creativity is listed as one of the four core processes (National Association for Music Education, 2014). By incorporating improvisation into the choral rehearsal, students had an opportunity to be independent and creative while continuing to learn repertoire for future performances.

Engaged Learning Process

Using improvisation to teach choral repertoire allows students to better understand the harmonic structure of the music and become more engaged in the learning of new repertoire. During rehearsals with the improvisational group, students learned the bassline of repertoire, improvised rhythmically on the bassline, and improvised new melodic material over the bassline. By unpacking the repertoire further than just the written melody, students expressed that they understood the music and felt more comfortable when going back to singing their written part. This finding is similar to other researchers who found that students who participated in improvisation recognized how it helped them understand the music (Eastridge, 2015;

Snell, 2006). Additionally, participating in improvisation facilitated critical thinking skills through music, engaging students fully in the learning process (Garrett, 2013).

Exploring Singing Voice

Implementing improvisation activities provided students with the opportunity to explore the various parts of their voice. Several students who participated in the improvisational group attributed choir to a place where they could explore their voices and try new musical ideas.

Implications for Music Education

While improvisation is valued by many music educators (Gruenhagen & Whitcomb, 2014), it is rarely used in the process of teaching repertoire to large ensembles (Hickey, 2012; Langley, 2018). This may be largely associated with the priority ensemble teachers put on performance (Freer, 2010; Langley, 2014; Williams, 2011). However, conclusions from this study indicate that improvisation is a worthwhile activity to use of rehearsal time, as it has a positive effect on the musical achievement of young choir singers while also allowing them an opportunity to be creative. Therefore, music teachers should consider using improvisation as a way to improve blend among young singers in a beginning choral ensemble and provide enriching musical experiences.

Implementing improvisation activities provide students with an opportunity to explore the various parts of their voices. This may lend itself well to students experiencing vocal changes during adolescence (Phillips, 2014). As each child's voice change experience is unique (Kennedy, 2004), choir teachers should consider giving

students time to explore their voices in an informal way to avoid pressure or discomfort during this transition.

Finally, when implementing improvisation, music educators should strive to establish a positive, judgement-free environment. By doing so, students will feel more comfortable to explore, try their best, and have fun.

Suggestions for Future Research

Keeping the conclusions and implications for music education in mind, the following are suggestions for future research:

1. Replicate the study using one group of students as participants for the entire study. While I used purposive sampling to balance singers between groups, there is a chance that the groups were not balanced well, leading to the improvisational group scoring higher than the traditional group during the pre-test. Perhaps, only having one group of students, that first rehearses in a traditional way and then adding improvisation, would reveal more rich data about any changes in musical achievement and student experience in choir. If using two groups of students, consider using students' music aptitude to divide groups.

2. Replicate the study with a variety of teachers in different settings. This will help greater determine the effect of improvisation among various choral ensembles. This would help to distinguish improvisation from the possible influence of direct instruction from one teacher.

3. Consider studying the effect of improvisation on adolescent's changing voice. How does improvisation affect their experience while going through a voice change?

Closing

Though the benefits of improvisation on students' musicianship (Azzara, 1993, 2005, 2008; Gordon, 2003; Hickey, 2012; Kratus, 1991) and student experience (Beegle, 2010; Burnard, 2002; Eastridge, 2015; Pearsall, 2016) are evident, many ensemble teachers are pressured to prioritize performance (Freer, 2010; Langley, 2014; Williams, 2011). Gordon (2003) stated,

> Suffice it to say that the more one is capable of improvisation, regardless of whether music is followed as a vocation or an avocation, the better that person will respond to music. . . All that is required to impel this reality is appropriate guidance, guidance that emphasizes learning rather than teaching with special attention given to individual differences personified by the unique levels of music aptitudes each person possesses (p. 2).

Isn't this the role of music educators— to teach our students to respond to music? As responsive music teachers, we must create an environment where our students feel free to create and explore. Through improvisation, we can challenge our students to use higher order musical thinking rather than remain bounded by printed note (Bell, 2004).

At the last rehearsal with each group, I asked students to write what chorus is to them. Hannah, participant in the improvisational group, so poignantly summarized her experience improvising in choir:

> To me, chorus is experimenting with your voice with your friends. It is trying out new things to sing and seeing which one you like best. Choir is singing your heart out, no matter what other people think.

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Appendix A

CHORAL SINGING ACHIEVEMENT LIKERT-TYPE RATING SCALE

1- None of the time   2- Some of the time   3- Most of the time   4- All of the time

Intonation

The ensemble performed with a sense of tonality. _____

The ensemble performed with accurate pitches. _____

The ensemble sang in tune. _____

Rhythm

The ensemble performed with a sense of meter. _____

The ensemble performed accurate rhythms. _____

The ensemble performed with a steady beat. _____

Blend

The ensemble sang with unified voices. _____

The ensemble sang with uniform vowel production. _____

The ensemble demonstrated supported breath control. _____

Phrasing

The ensemble demonstrated the ability to shape phrases musically. _____

The ensemble performed dynamics as indicated in the score, reflecting phrase

structure. _____

Appendix B

PARENT INFORMATION/CONSENT LETTER

Dear Parents and Guardians,

I am a graduate music education student at the University of Delaware working toward a degree concentrating on elementary music education. For my graduate thesis, I am interested in exploring how using improvisation in the choral rehearsal may affects students' choral singing and overall experience in the ensemble.

To investigate the incorporation of improvisation in the choral rehearsal. I will split the fifth and sixth grade chorus into two groups for the month of January/early February. One group will continue to meet on Monday mornings and the other will meet on Tuesday mornings. Both groups will learn the same piece of music, with one incorporating improvisation and the other following a traditional choral rehearsal model. After four weeks, I will audio-record both groups singing the song. These recordings will be rated by judges. Because these are group recordings, no identifying factors will be linked to your child.

I will also have students keep chorus journals. Some students will also be asked to participate in focus group interviews. The information obtained from journals and interviews will be analyzed for themes. Students' identities will be known only to me and my Master's thesis advisor. All data collected will be immediately de-identified by using pseudonyms for use in my thesis.

Please complete the form below and return by Friday December 7. If you have any questions, feel free to contact me by email at ███████████████████████. If you would like more information regarding the rights of participants in research, please contact the University of Delaware Research Office at (302) 831-2137 or at udresearch@udel.edu.

Sincerely, Emma Harrington

_____

Parent/Guardian Consent: Your signature below indicates that you *do* grant permission for your child to participate in the above study. It indicates that you understand the voluntary nature of this study, and that you may withdraw your child from the study without penalty. For further information, please contact Emma Harrington at ███████████████████████.

I, _____, ☐ give ☐ do not give
        (Parent/Caregiver Name)   (Check one)

permission for _____to participate in this research study.

<div align="center">(Child's Name)</div>

My child can come to rehearsals on Tuesday mornings instead of Mondays (7:45am). ☐ Yes   ☐No

Signed,

Parent or Guardian: _____Date: _____

ASSENT FORM

Title of Project: Improvisation in the Beginning Choral Rehearsal

Principal Investigator(s): Emma Harrington

I am asking if you want to be a part of a research study. This form tells you what the study is about, what you will be asked to do if you decide to be in the study, and possible good and bad things about this study. Please read this paper and ask me any questions.

WHAT IS THE PURPOSE OF THIS STUDY?

This research study is to better understand how musical improvisation can help with singing in a choir. Improvisation is when we make up our own music without planning it out ahead of time.

I am asking you to participate because I want to learn more about how improvising can help choirs sound better and how improvising can make you have more fun! This will make me a better teacher. I also hope that throughout our time together you will have fun learning to improvise and learning new music.

WHAT WILL YOU BE ASKED TO DO?

For this study, I will split our choir into two groups. I will teach both groups the same piece of music. Some of you will have the chance to improvise during rehearsal.

At the end of our time together, I will record our entire class singing the song we learned. You will also be asked to keep a chorus journal. Every week I will give you a different idea to write about. Some of you may be asked to be in an interview as well. All of this will help me to better understand more about how improvisation has impacted your time in chorus.

WHAT ARE THE POTENTIAL GOOD THINGS ABOUT THIS RESEARCH?

By participating, you will learn new music. You may also have some improvisation in your rehearsal. This will allow you to create your own music.

WHAT ARE THE POSSIBLE BAD THINGS ABOUT THIS RESEARCH?

I do not expect your participation in this study to expose you to any risks other than what you would typically encounter in daily life.

HOW WILL CONFIDENTIALITY BE MAINTAINED? WHO MAY KNOW THAT YOU PARTICIPATED IN THIS RESEARCH?

I will make sure that no one knows you were part of this study except myself and my teacher. As soon as anything is collected from you, you will be given a fake name. I cannot promise that information shared with other classmates during small group conversations will be kept private.

All paper documents will be kept in a locked filing cabinet only available to myself. Anything on the computer will be kept in a password protected folder. After three years, all information will be destroyed. Paper documents will be shredded and thrown out. Electronic data will be permanently deleted off the computer and flash-drives will be shattered and destroyed.

I will make every effort to keep anything that could identify you private. What I find during this study may be presented or published. If this happens, no information that gives your name or other details will be shared.

The privacy of your records will be protected to the extent permitted by law. Your research records may be viewed by the University of Delaware Institutional Review Board, which is a committee formally designated to approve, monitor, and review biomedical and behavioral research involving humans. Records relating to this research will be kept for at least three years after the research study has been completed.

I also must let you know that if during your participation in this study I was to observe or suspect, in good faith, child abuse or neglect, I am required by Delaware state law obligates us to file a report to the appropriate officials.

WILL THERE BE ANY COSTS TO YOU FOR PARTICIPATING IN THIS RESEARCH?

There are no costs associated with participating in this study.

WILL YOU RECEIVE ANY PAY FOR PARTICIPATION?

You will not be paid for being part of this study.

DO YOU HAVE TO TAKE PART IN THIS STUDY?

Taking part in this research study is entirely up to you. You do not have to participate in this study. If you choose to take part, you have the right to stop at any time. If you decide not to participate or if you decide to stop taking part in the research at a later date, there will be no consequence. Your decision to stop participation, or not to participate, will not influence current or future relationships with the University of Delaware.

As a student, if you decide not to take part in this research, your choice will have no effect on your future participation in chorus.

WHO SHOULD YOU CALL IF YOU HAVE QUESTIONS OR CONCERNS?
If you have any questions about this study, please contact the Principal Investigator, Emma Harrington, at ███████████ or ███████████. You may also contact Dr. Suzanne Burton, academic advisor, at ███████████.
If you have any questions or concerns about your rights as a research participant, you may contact the University of Delaware Institutional Review Board at hsrb-research@udel.edu or (302) 831-2137.

You are making a decision whether or not to participate in this study. Your signature indicates that you have read the information provided above and decided to participate.

_____   _____   _____
  Printed Name of Participant   Signature of Participant   Date

_____   _____   _____
  Printed Name of Parent/Guard.   Signature of Parent/Guard.   Date

Appendix D

IRB APPROVAL LETTER

UNIVERSITY OF DELAWARE

RESEARCH OFFICE

210 Hullihen Hall
University of Delaware
Newark, Delaware 19716-1551
Ph: 302/831-2136
Fax: 302/831-2828

DATE: July 26, 2018

TO: Emma Harrington
FROM: University of Delaware IRB

STUDY TITLE: [1235689-2] Improvisation in the Beginning Choral Rehearsal

SUBMISSION TYPE: New Project

ACTION: APPROVED
APPROVAL DATE: July 26, 2018
EXPIRATION DATE: July 25, 2019
REVIEW TYPE: Expedited Review

REVIEW CATEGORY: Expedited review category # *(6,7)*

Thank you for your submission of New Project materials for this research study. The University of Delaware IRB has APPROVED your submission. This approval is based on an appropriate risk/benefit ratio and a study design wherein the risks have been minimized. All research must be conducted in accordance with this approved submission.

This submission has received Expedited Review based on the applicable federal regulation.

Please remember that underlined consent is a process beginning with a description of the study and insurance of participant understanding followed by a signed consent form. Informed consent must continue throughout the study via a dialogue between the researcher and research participant. Federal regulations require each participant receive a copy of the signed consent document.

Please note that any revision to previously approved materials must be approved by this office prior to initiation. Please use the appropriate revision forms for this procedure.

All SERIOUS and UNEXPECTED adverse events must be reported to this office. Please use the appropriate adverse event forms for this procedure. All sponsor reporting requirements should also be followed.

Please report all NON-COMPLIANCE issues or COMPLAINTS regarding this study to this office.

Please note that all research records must be retained for a minimum of three years.

Based on the risks, this project requires Continuing Review by this office on an annual basis. Please use the appropriate renewal forms for this procedure.

- 1 -   Generated on IRBNet

Appendix E

HUMAN SUBJECTS TRAINING

Completion Date 14-Mar-2018
Expiration Date 13-Mar-2021
Record ID 26485224

This is to certify that:

Emma Harrington

Has completed the following CITI Program course:

Course In The Protection Human Subjects (Curriculum Group)
Human Subjects Protections - Social-Behavioral-Educational Focus - All UD Researchers/Faculty/Staff (Course Learner Group)
1 - Basic Course (Stage)

Under requirements set by:

University of Delaware

Appendix F

LESSON PLANS

Control Group

Rehearsal One:

- Teacher leads traditional vocal warm-ups.

    o Body stretching

    o Echo vocal sirens

    o "Hmm", 5-1, ascending, beginning D major

    o "Yah", 5-1, ascending, beginning G major

    o "Bidi, bidi, bidi, bidi, bum-bum", 5-4-3-2-1-5-1, descending, beginning
      G major

    o "Whether the weather be cold, whether the weather be hot, we'll be
      together whatever the weather, whether we like it or not", **notation
      for this?

- Teacher teaches notes to "Will There Really Be a Morning?" using modified
  rote song procedure.

    o Teacher sings excerpt for students.

    o Teacher asks students to keep the macrobeat.

    o Teacher asks students to keep the microbeat.

    o Teacher sings phrase, students sing back.

    o Students sing entire excerpt.

- Teacher records the ensemble singing excerpt as pre-test data.

99

- Teacher provides journal prompt and time for private journaling.

Rehearsal Two:

- Teacher leads traditional vocal warm-ups.

    o Echo vocal sirens

    o "No", 5-3-4-2-1, ascending, beginning C major

    o "Bidi, bidi, bidi, bidi, bum-bum", 5-4-3-2-1-5-1, descending, beginning
      G major

    o "I love to sing", 1-8-5-3-1, ascending, beginning C major

- Teacher reviews notes to "Will There Really Be a Morning?"

- Teacher provides specific feedback, and reinforces notes and rhythms using
  echoing.

- Teacher provides journal prompt and time for private journaling.

Rehearsal Three:

- Teacher leads traditional vocal warm-ups.

    o Body stretching

    o Echo vocal sirens

    o "Hmm", 5-1, ascending, beginning D major

    o "Why is it so early?", 5-4-3-2-1, ascending, beginning D major

    o "Zee-ay, Zee-oh, Zee-ah-ah-ah-ah", 5-8-5-8-5-8-5-3-1, ascending,
      beginning C mjor

- Teacher reviews notes to "Will There Really Be a Morning?"

- Teacher provides specific feedback, and reinforces notes and rhythms using echoing.

- Teacher provides journal prompt and time for private journaling.

Rehearsal Four:

- Teacher leads traditional vocal warm-ups.

  - Body stretching

  - Echo vocal sirens

  - "Blah-blah-blah-blah-blah", 5-4-3-2-1, descending, beginning G major

  - "Zing-ah…", 1-5-4-3-2-1, ascending, beginning D major

  - "Nee", 5-4-3-2-1, descending, beginning F major

- Teacher reviews notes to "Will There Really Be a Morning?"

- Teacher records the ensemble singing excerpt as pre-test data.

- Teacher provides journal prompt and time for private journaling.

Experimental Group

Rehearsal One:

- Teacher facilitates improvisation game.

  - Students will be in a big circle.

  - Teacher will start melodic ostinato.

  - Students will join in one at a time, layering in around the circle.

    Students are encouraged to join in with melodic or tonal improvisation.

- Teacher teaches notes to "Will There Really Be a Morning?" using modified rote song procedure.
  - ○ Teacher sings excerpt for students.
  - ○ Teacher asks students to keep the macrobeat.
  - ○ Teacher asks students to keep the microbeat.
  - ○ Teacher sings phrase, students sing back.
  - ○ Students sing entire excerpt.
- Teacher records the ensemble singing excerpt as pre-test data.
- Teacher provides journal prompt and time for private journaling.

Rehearsal Two:
- Teacher facilitates same improvisation game from rehearsal one, but with a student volunteer beginning.
  - ○ Students will be in a big circle.
  - ○ Teacher will ask for student volunteers to begin melodic ostinato.
  - ○ Students will join in one at a time, layering in around the circle. Students are encouraged to join in with melodic or tonal improvisation.
- Teacher reviews notes to "Will There Really Be a Morning?"
- As a group, students will sing the song while the teacher sings the chord roots.
- Teacher teaches chord roots to students.
- Teacher will sing the song while the students sing the chord roots.
- Teacher splits the class in half.

- o Half sing song

- o Half sing roots

- o Switch

- Teacher will demonstrate how to improvise on roots through same/different exercise.

  - o Teacher will sing two patterns. Teacher will ask students to identify the patterns as having the same or different rhythm.

  - o Once students show success with recognizing same and different patterns aurally, teacher will have students improvise different rhythm patterns from teacher.

  - o Teacher will have students solo.

- Students will sing the song while the teacher improvises on the roots.

- Teacher will sing the song while the students improvise on the roots.

- Teacher splits the class in half.

  - o Half sing song

  - o Half improvise on roots

  - o Switch

- Teacher provides journal prompt and time for private journaling.

Rehearsal Three:

- Teacher facilitates improvisation game (see rehearsal two).

- Teacher reviews notes to "Will There Really Be a Morning?"

- Teacher reviews roots using modified procedure from rehearsal two.

- Teacher will demonstrate how to improvise new melodic material over bass line.

  o As a group, students will sing the first line on melody and teacher will improvise new line in response.

- Teacher will ask students to get into groups of two or three. In their groups, students will explore new melodic material over the bass line. Teacher will rotate around room to hear students' improvisations and take notes on student experience.

- Teacher provides journal prompt and time for private journaling.

Rehearsal Four:

- Teacher facilitates improvisation game (see rehearsal two).

- Teacher reviews notes to "Will There Really Be a Morning?"

- Teacher records the ensemble singing excerpt as pre-test data.

- Teacher provides journal prompt and time for private journaling.

CHORUS JOURNAL COVER

My Chorus Journal

Name: _____

Appendix H

TRADITIONAL GROUP FOCUS GROUP INTERVIEW TRANSCRIPT

Teacher-Researcher: Alright, so why are you in chorus?

Luke: I like singing.

Grace: I like singing too.

Julie: Yeah, same.

Grace: I like to learn how to sing in unison.

Teacher-Researcher: Well, so you like to sing. That's awesome. What would you say your favorite thing about chorus is, and why?

Luke: Like, singing in a group because it sounds good and–

Julie: I like when we sing like the two parts, with the melody and then we put it all together.

Teacher-Researcher: Right.

Julie: Yep.

Teacher-Researcher: When the two parts of the choir are singing different parts, and the way that sounds?

Julie: Yeah.

Teacher-Researcher: Awesome, so you would want us to do more of that sort of stuff?

Grace: Yeah.

Teacher-Researcher: Awesome. What's your least favorite thing about chorus? Besides Monday mornings.

Luke: I got nothin'.

Teacher-Researcher: You got nothin'?

Luke: Hm-mmm.

Teacher-Researcher: Nothing?!

Luke: Only thing is Monday mornings for me.

Julie: For some reason, I don't like learning the stuff. I just like getting it done, like fast, so like, if you just keep practicing, practicing.

Teacher-Researcher: Okay, so the process of learning the songs, you don't love but once we actually have the song learned and we can run through the whole thing - that's what you enjoy the most?

Julie: Mm-hmm.

Luke: I think my least favorite thing is that we have to do that slow version of the song. I don't like that.

Teacher-Researcher: You like–

Luke: I like the faster one.

Teacher-Researcher: - you like faster songs.

Grace: Yeah. I don't like how it takes so long, when we're singing slow.

Teacher-Researcher: Interesting. Do you not like slow songs in general? Or just this particular song you don't love?

Luke: It depends. I think it depends, yeah.

Grace: It depends.

Teacher-Researcher: Interesting. Do you think chorus is a place where you can be creative?

Julie: Mm-hmm.

Teacher-Researcher: How so, if you had to say?

Luke:	I feel like you can sing how you sing at home. Coz some people get embarrassed, like I do, get scared and nervous but people won't really judge you.
Teacher-Researcher:	Mm-hmm.
Julie:	Because everyone's doing it.
Luke:	Yeah.
Teacher-Researcher:	Right, and you're singing with the group. What don't you like about – going back to learning the song, going through that process until we finally get to the point where we can run stuff – is there anything particular that you don't like about -
Julie:	I felt like it kept doing the same part just like over and over again, not learning as much as the other parts.
Teacher-Researcher:	Mm-hmm.
Julie:	If we like did a little bit more of the other part and then combining them together.
Teacher-Researcher:	Mm-hmm. Yeah, so it was just a lot of time spent on a little part, so it was kind of draining?
Julie:	Yeah. Well, which is kind of good to get used to that part–
Teacher-Researcher:	Right. But it's not as exciting?
Julie:	Yeah *[chuckling]*.
Grace:	Yeah.
Teacher-Researcher:	Were you or any of you in third grade chorus?
Grace:	No.
Julie:	No, they started that one when I was in fourth grade–
Luke:	This is my first year in chorus.

Teacher-Researcher:	Why didn't you do chorus last year?
Luke:	'Cause I couldn't sing.
Teacher-Researcher:	'Cause you couldn't sing?
Grace:	*[Laughing]*
Luke:	No.
Teacher-Researcher:	Why do you think you couldn't sing?
Luke:	I never really did much thought of that– - but now my friends, they're in chorus kind of told me about it and got me thinking about it.
Teacher-Researcher:	Okay. And you're in sixth grade- so why didn't you do chorus the last two years?
Grace:	Well, I didn't know where to get the paper, so–
Teacher-Researcher:	*[Chuckling]* And Nora, you were in from fourth grade?
Julie:	Mm-hmm.
Teacher-Researcher:	Why did you join in fourth grade?
Julie:	Because I always wanted to do chorus.
Teacher-Researcher:	Great. If there were more opportunities for you to create your own music you know, by yourself or with small groups, is that of interest to you at all?
Julie:	Mm-hmm.
Luke:	As long as it's with groups, yep.
Teacher-Researcher:	As long as it's with groups? You wouldn't want to do anything alone?
Luke:	I'm not really that kind of person.
Teacher-Researcher:	Got it.

Luke:	It depends on what it is.
Teacher-Researcher:	Do you feel like you have like a – mm – like a voice in chorus? I don't mean like you can sing, but do you feel like you have a say in what we're doing and stuff? Or do you feel like it's very teacher-led?
Luke:	Teacher led.
Julie:	Teacher led.
Teacher-Researcher:	Gotchya. Do you wish that you had more of a voice, in terms of maybe the music we're doing–
Grace:	Yeah.
Teacher-Researcher:	- or the way things are run.
Luke:	Yeah.
Grace:	Yes.
Julie:	Yeah.
Teacher-Researcher:	Okay, so you wish you had more say in the choices of songs we're doing?
Julie:	Like, I'd prefer songs that you don't go too high because I can't do that well–
Teacher-Researcher:	Mm-hmm.
Julie:	- and I can't hold notes that high for a long period of time.
Teacher-Researcher:	Mm-hmm.
Julie:	That's why.
Teacher-Researcher:	Do you know that for sure? Or you feel like – like, if you had an opportunity to really explore the different parts of your voice without having to read the music on the page?

Julie:	I have tried.
Teacher-Researcher:	How?
Julie:	Like at home, and the lower parts are easier for me.
Teacher-Researcher:	Right, so do you think if there was some time during rehearsal for people to just be in small groups and kind of explore their voice?
Julie:	I would do that!
Grace:	Same.
Teacher-Researcher:	Alright- Well, unfortunately, that's all the time we have. Thank you for doing this!

[End of Audio]

Appendix I

IMPROVISATIONAL GROUP FOCUS GROUP INTERVIEW TRANSCRIPT

Teacher-Researcher: Thank you for being here! My first question is why are you in chorus? These are pretty similar to the questions you answered for the journals just you can elaborate more. Why are you in chorus? Doesn't matter what order you go in.

Lucy: I can go first.

Teacher-Researcher: Okay.

Lucy: I'm in chorus because last year they said chorus was really fun and I like being with my friends and most my friends are in chorus. Also, I wanted to get a better singing voice for the musical.

Teacher-Researcher: Great!

Mia: I'm in chorus because I've always wanted to sing and write my own music, and chorus helps me with that.

Teacher-Researcher: Okay. I want to stop you there. How does chorus help you with writing your own music?

Mia: Because it teaches me how to get the right notes and different keys, and different sounds that you can sing. Plus it's fun with my friends.

Teacher-Researcher: Yeah. When you say you write your own music what do you mean by that?

Mia: Songs on the keyboard and stuff.

Teacher-Researcher: Cool. With piano and voice?

Mia: Yeah.

Teacher-Researcher: Awesome. Do you write them down, or?

Mia:	Mm-hmm.
Teacher-Researcher:	Sweet. Addison?
Addison:	I'm in chorus because I've always had a passion for singing. I'm just always singing here.
Teacher-Researcher:	Yeah. That's awesome. You said you're in chorus Lucy because people last year said it was fun. If two people who are in chorus last year, what was fun about it?
Mia:	Last year?
Addison:	I think the singing.
Mia:	*[Laughter]* Yeah. Just having fun with our friends and then right after just having lunch with them. Because they gave an opportunity because if you weren't in the same color group or homeroom you didn't really see them that much. It was just a time to relax and have fun.
Teacher-Researcher:	That's awesome. Do you miss that this year being that it's in the mornings?
Mia:	Yeah.
Addison:	Mm-hmm.
Teacher-Researcher:	What is your favorite part about chorus, favorite activity in chorus and why?
Lucy:	I like learning new songs because a lot of the songs are really fun to sing and it's fun to be there with your friends because you get to learn together, I guess.
Teacher-Researcher:	Yeah.
Mia:	I like it—well, wait—.
Teacher-Researcher:	Your favorite activity.

Mia: Yeah. I like performing on the stage because you've worked so hard for the last few months and then it's just you let all out on stage.

Teacher-Researcher: I see 0:03:15.

Addison: Well, when we were doing the—I liked for warmup when we—when someone would start and then we kept going.

Teacher-Researcher: The improv circle?

Addison: Yeah.

Mia: That was fun.

Teacher-Researcher: Awesome. What are your other—I saw you guys nod, so what did you like about that activity?

Lucy: I liked how you got to add onto the song and got to choose what you were singing, and how it all came together and sounded really cool.

Mia: I like it the same as Sadie because the more you layer on the different sounds or try things, in different beats, it just sounds really cool when you're all done.

Teacher-Researcher: Yeah. It's cool because it's your own creation. You're not following a paper or something. What would you say your least favorite thing about chorus is besides Monday mornings *[laughter]*? Or I can phrase it, what you'd like to see more of or anything like that?

Lucy: I guess that we don't get a lot of time to practice in groups just to work on what we need to work on with other people.

Teacher-Researcher: When you say in groups, what do you mean by that? Groups of—

Lucy: The one time we came up with the new tempo for the song.

Teacher-Researcher: Yeah, the new melody?

Lucy:	The part with the feathers. I liked that because you got to work and focus on what you wanted to do with other people who are thinking the same things. You got more practice time, I guess.
Teacher-Researcher:	Yeah. Being with small groups, three or four people.
Lucy:	Yeah.
Teacher-Researcher:	I guess jumping off, Lucy, about what you said about making up the new melody line in those small groups, what did you guys think of that? Lucy enjoyed it.
Addison:	That was awesome.
Teacher-Researcher:	Why?
Addison:	Because you could take longer then make it your own.
Mia:	Yeah. You could take the same beat but add different beats in it within the other part.
Teacher-Researcher:	Right. Right. Those types of things would you like to see in chorus more?
Lucy:	Yeah.
Mia:	Yup.
Addison:	Yup.
Teacher-Researcher:	Did you find that doing all of that actually helped you to learn our music more?
Addison:	Mm-hmm.
Lucy:	Yeah. I feel like it helped you understand the music more.
Mia:	Yeah .
Teacher-Researcher:	Yeah. Especially when we were doing the baseline.
Mia:	Right.

Teacher-Researcher: Before we did all those sorts of things did you find that chorus was a place where you could really be creative or was it more those rehearsals that we did that let that side come out?

Lucy: I feel like when we got to do more of the improv you could be more creative, but we were still having fun when we weren't doing the improv.

Teacher-Researcher: Okay. Right. It wasn't that chorus is boring and then we did this, and it totally changed everything, but you do feel like you were still able to have fun with the improv but be more creative.

Lucy: Mm-hmm.

Teacher-Researcher: Do you wish that in chorus you had more of an opportunity to write your own music for the group or pick the music we were going to perform, or do you prefer to just—for me to do all that and you just do it?

Lucy: Well, I think it'd be fun if we could pick the music. Maybe not write it because we're not that experienced but it'd be fun if we could pick what we wanted to sing.

Mia: Well, maybe you could do some of it, but you would ask us, or it would pay the song a little bit and then we could vote on it.

Teacher-Researcher: Yeah. That's awesome.

Addison: Well, I think that and if we pick the music because we could do a song that everyone is comfortable with and then we could do other songs where if we've done something like this before, so we get more experience.

Teacher-Researcher: Right. Anything else from the four weeks that we rehearsed on the Tuesdays instead of Mondays that want to bring up, that you liked, didn't like?

[Pause]

Teacher-Researcher: It's okay if you don't.

Lucy: I liked when you did the bassline because it sounded really cool when we put the two pieces together.

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Mia: I liked those baselines because it helps you learn the music and the under part of it.

Teacher-Researcher: Right.

Addison: Yeah. I would say the same thing.

Teacher-Researcher: Awesome. All right. Well, thank you guys for doing this. I appreciate it.

[End of Audio]