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Listen Up! The Impact of Music on Students' Reading Comprehension

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Listen Up! The Impact of Music on Students' Reading Comprehension

By,

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A thesis submitted to the Department of Education of The College at Brockport, State University
of New York, in partial fulfillment to the requirements for the degree of Master Science in

Literacy Education

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Abstract

This research explores the implementation of instrumental versions of modern day music during guided reading groups as a teaching tool to assist students' reading comprehension. The purpose of this study is to better support all students' reading comprehension skills through implementing music as a tool during guided reading lessons. Data were collected for this study over a period of four weeks using running reading records, a retelling assessment, an interview, and observation notes during guided reading lessons. Data were analyzed for how the music impacted students' reading comprehension as a whole.

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Introduction

Have you ever been driving in your car and heard a song that transports you back in time, bringing back a certain memory? Music is a powerful tool that affects the memory. You can hear that sad song on the radio, and the memory of your first heartbreak comes flooding back. Perhaps you hear the song that was played at your high school graduation and think of the day you graduated into the adult world. Whenever I hear *Can You Feel the Love Tonight*, I immediately remember the countless number of times I would rewind my VHS tape of *The Lion King*. I quite often think about how I have no issues with remembering the lyrics to a song after listening to it once but have to read a journal article assigned for class several times in order to recall the information. Then I think about my students and how they have no issues singing the song they heard on the radio that morning on the bus ride into school but are unable to tell me what they had just read from their independent reading book.

Earlier in the year, I had my students take their second round of Renaissance STAR 360 (2016) testing for English Language Arts (ELA) and decided to play instrumental music while my students took their tests. The results of the test showed a majority of my students had improved in their reading levels. While this was an exciting finding, something I found more interesting was the mood of my students while they took their tests. My students were significantly calmer and less anxious than they had been the first time they took the STAR test. As I thought about what could have caused this change of mood, the first factor I thought of was the classical music that had been playing. Researchers have found that music can reduce negative feelings and increase stress tolerance (Sze & Yu, 2004). After making this observation, I could not help but wonder how instrumental versions of modern day music would affect my students if

it were played outside a test setting. Often when I have my students engage in independent work, I will allow them to listen to music on their Chromebooks. During these times, I see my students more focused and attentive to their work. A majority of the questions on the STAR test revolve around measuring students' reading comprehension. Based upon my observations of students' response to having classical music played during their test and my students' test results, I implemented the use of instrumental versions of music familiar to my students during my guided reading groups in an effort to increase my students' reading comprehension. If this teaching tool is successful, it would help close the gap for those students who have low reading comprehension skills.

Topic and Research Problem

Literacy acquisition is a main focus among educators in all school settings today. According to Register, Darrow, Standley, and Swedberg (2007), thirty percent of children have difficulty reading, and there is no one method that seems to work for all students with reading difficulty. Students who have difficulty reading not only have difficulty accurately reading the words on the page but also understanding what they have read. However, what about the students who can accurately read words but have trouble comprehending what they have read? Educators may use different comprehending strategies to assist students when they are attempting to understand what they have read. However, similar to finding one method to assist students reading in general, there is no one method that seems to help students with their reading comprehension (Register, Darrow, Standley, & Swedberg, 2007).

Music has been found to contribute to the acquisition of linguistic skills in the areas of reading, writing, listening, and speaking (Rashidi & Faham, 2011). There have been several

studies conducted that have examined the use of classical music to assist students in acquiring said linguistic skills. In relation to reading comprehension, studies have found that the use of classical music or music in general has helped improve students' reading comprehension skills (Anderson & Fuller, 2010; Purnell-Webb & Speelman, 2008; Rashidi & Faham, 2011).

Our students all learn differently, and they need a method of instruction that is going to best assist them in their literacy learning. Reading comprehension is an integral part of literacy. If students are unable to comprehend what they have read, they will not truly be able to analyze a text and understand what the author is trying to convey. Students may be able to read words accurately, but if students do not understand what the words they are reading mean, then the meaning of the text is going to be lost. As previously stated, there has been a link between the use of music and the improvement of students' reading comprehension. My focus was using music as a tool to best help my students succeed in comprehending texts.

Rationale

Observing my students become frustrated as I asked them questions about a text we had just completed, or complete a project in which they needed to process what they had read led me to further investigate ways in which I could help my students successfully comprehend texts. I have tried teaching my students several strategies that could assist their comprehension skills. However, while these strategies have helped my students a little, the strategies have not had a major impact on students' comprehension. Reading comprehension does not only affect students in the content area of ELA but in all content areas. It is extremely important to find a method that will help students develop strong comprehension skills in order for them to be successful in all content areas.

Finding ways in which we can help our students is important among all educators. Music is a tool that has been found to assist students in the different areas of literacy. Therefore, it should be looked at more deeply through research in order to see if music is beneficial to students' reading comprehension. In addition to inquiring if music is beneficial to students' reading comprehension, there needs to be further exploration into the type of music that is most helpful in assisting students' reading comprehension. Students seem to respond well to music whether they are listening to it on their own terms or if music is being played in the background while they are working. Finding a way to incorporate the music students love into their learning would be beneficial not only to the students, but also to the teacher. The more tools and strategies a teacher can gain to assist her teaching will only help the teacher become a stronger educator.

Purpose

The purpose of this study is to better support my students' reading comprehension skills through implementing music as a tool during my guided reading lessons in my seventh and eighth grade 6:1:1 classroom. In my classroom, there are students who are reading at grade level, at one or two years below grade levels, and at a third grade level. No matter the level at which my students are reading, an area of difficulty for all my students is reading comprehension. While poor reading comprehension is a commonality among my students, another commonality is my students' love for music. The purpose of my research is to find a way in which I can incorporate students' love for music into guided reading lessons, which may in turn assist my students' reading comprehension.

According to Sze and Yu (2004), “Music integration provides children with concrete, hands-on experiences that are essential to developing each child’s ability to reason, think, solve problems, analyze, evaluate and to enhance creativity” (p.1). All students have different modes of learning, but a common way in which all of my students learn is through hands-on experiences. Music fulfills this learning style, meaning it could be beneficial to my students’ learning. Also, research has found that listening comprehension and reading comprehension involve similar cognitive processes and suggests the similarity in cognitive processes implies that the task of listening and reading are not competitive (Anderson & Fuller, 2010). I took the research that suggests the cognitive processes that revolve around listening and reading comprehension are not competitive and applied this research to my own instruction. I determined if music can improve upon students’ reading comprehension.

Research Question

How might the incorporation of instrumental versions of modern day music during guided reading lessons impact adolescent students’ reading comprehension?

Review of Literature

The following literature review summarizes key points in relation to reading comprehension and the impact of music on reading comprehension. Research on the effect of playing music while students are engaged in reading activities indicates students’ reading comprehension increases when placed in these conditions. The review also looks at a variety of theories related to music, how the familiarity of the background music being played can impact

students' reading comprehension, and the overall impact of music on students' reading comprehension.

Familiarity of Music

When students are in a learning situation, teachers want to create a positive atmosphere, which will promote the best mood for learning. When students are in a positive mood, they tend to remember information that is taught better than when in a negative mood. According to Stalinski and Schellenberg (2012), research indicates that positive moods are associated with enhanced recall of a narrative, where negative moods are associated with reduced word recall. Therefore, when students are in a positive mood while reading, they tend to recall what has been read more easily as compared to when they are reading in a negative mood. Teachers have the ability to create a positive mood and atmosphere in which students are learning and reading. One way in which teachers can create this positive space is through playing music that is familiar to students.

The familiarity effect concludes that students are able to recall information from a text more easily when exposed to familiar melodies as they are not responsible for learning a new melody and are able to construct an associative link between the familiar melody and the text that they are reading (Purnell-Webb & Speelman, 2008). When music is playing in the background during a lesson, students are naturally going to hear the music in the background as they are reading. However, when the music playing in the background is familiar to students, they are not concentrating on figuring out the song which is playing, but rather linking the information that they are reading to the music playing (Purnell-Webb & Speelman, 2008). Students are going to associate the music that is being played in the background with the text that

they are reading simply because the familiar song is playing at a certain point while the student is reading the text. A song that is unfamiliar to students may be considered a distraction at first, hindering students' abilities to recall a text. However, if the melody being played is familiar, there are fewer cognitive resources required for processing a text, so more resources are available to store material in memory (Purnell-Webb & Speelman, 2008). When students do not have to use cognitive resources to attempt to figure out the melody playing in the background, they will be able to use more cognitive resources to store the information that they are reading in their memory, which will later be recalled.

Students are not only using less cognitive resources to determine a melody being played, but they are also making connections between the melody being played and the text that they are reading (Purnell-Webb & Speelman, 2008). When students have not been exposed to a certain melody before reading a text, they may concentrate more on the unfamiliar melody than on the text itself. However, if the student is familiar with the melody being played, then the student will not concentrate as much on the melody, but rather on making associations between the music they are listening to and the text they are reading. If the music playing in the background while students are reading a text also connects to students' culture, their likelihood to comprehend a text may increase as well. Vygotsky suggests that learning does not take place in cognitive isolation, but rather inside the context of activities and social interactions. He also declares that regardless of a student's cultural background, the most effective learning occurs when learning from outside the school setting which makes meaningful connections to the learning taking place in school (Meacham, 2001). Music is a large part of students' culture; therefore utilizing this aspect of students' home lives in their school work may be beneficial to their reading comprehension.

As previously stated, using familiar music can create a positive and enjoyable learning atmosphere in the classroom. Researchers believe that the right type of music can help make students less stressed, more relaxed, happier, and even more productive (Tze & Chou, 2010). There are some students who find reading to be a stressful experience, which in turn affects their reading comprehension. If students are nervous about reading the text, they are more concentrated on not making themselves look foolish in front of their peers than on what the text they are reading actually says. Creating a calm, less stressful atmosphere has been found to help students with their reading comprehension (Rashidi & Faham, 2011). The familiarity of the music that is being played in the background while students are reading a text can have a real impact on students' reading comprehension.

Reading Comprehension and Music

According to Register, Darrow, Standley, and Swedberg (2007), thirty percent of children have difficulty reading and approximately seventeen percent of school-age children have been categorized as having a specific learning disability. There has been no one method of instruction that seems to work for all students who have difficulty reading. However, there is a growing body of literature that supports specific music experiences used to teach and practice essential elements of literacy learning (Register, Darrow, Standley, & Swedberg, 2007). Howard Gardner's Multiple Intelligence Theory suggests that there are eight different types of learning styles students use when learning new material. One of the intelligences Gardner suggests that can be used by students is musical (Kennedy & Scott, 2005). There have been several studies conducted that suggest music can assist students in all areas of literacy, but more specifically with reading comprehension (Anderson & Fuller, 2010; Purnell-Webb & Speelman, 2008;

Rashidi & Faham, 2011). While there is an alarmingly high percentage of students who have difficulty reading, there are also students who may not have difficulty reading but do not necessarily understand what they have read. However, the researchers have found evidence that listening comprehension and reading comprehension involve similar cognitive processes. This suggests that the similarity between the two types of comprehension involving listening and reading tasks are not necessarily competitive and supports the notion that music could be educationally enriching (Anderson & Fuller, 2010). Therefore, if music is playing in the background while students are reading a text, in theory, the music should not compete with students' reading comprehension, but rather support their reading comprehension.

While music may support students' reading comprehension, the type of music that is playing can be detrimental to students' success. In a study conducted by Anderson and Fuller (2010), the reading comprehension of three-quarters of the students who participated in the study declined significantly when the participants were listening to lyrical music compared to their reading comprehension results when they were in a quiet setting. These results suggest that lyrical music may not be the best type of music to use in order to support students' reading comprehension. A great deal of research has found the best type of music to support students' learning is classical music. The Mozart Effect best supports the notion of playing classical music in order to enhance students' learning. The Mozart Effect was introduced by Rauscher, Shaw, and Ky in 1993 after the results of a study they conducted indicated the participants of the study who were exposed to Mozart's *Sonata in D major for Two Pianos* showed an increase in their spatial IQ scores, as opposed to those participants who listened to a relaxation tape or sat in silence (Linton, 1999). Essentially, the study concluded that when exposed to Mozart's music, an individual's IQ could increase, if only for a temporary portion of time. This has led researchers

to believe that there are more benefits to listening to classical music over other types of music on a student's learning (Rashidi & Faham, 2011).

Classical music has been found to be beneficial to students' learning and reading comprehension. However, as previously discussed, according to the familiarity effect, students are able to recall information from a text more easily when exposed to familiar melodies (Purnell-Webb & Speelman, 2008). When students hear a familiar melody they are able to make connections between those melodies and the text they are reading. According to Purnell-Webb and Speelman (2008), a previously determined rhythmic pattern may provide students with a schematic frame, which can act as a powerful mnemonic device. Students are able to use music as a mnemonic device to recall the information they have read in the text. If students associate certain familiar rhythmic patterns or songs with the information they are reading when they hear the melody later, they may be able to recall the information they have associated with said melody. Utilizing instrumental versions of songs that are familiar to students could be beneficial to their reading comprehension as supported by the Mozart Effect and familiarity effect.

A concern among many researchers and instructors in regard to playing music while students are completing a reading task is the notion that the music will be a distraction to the students. Kahneman's capacity model of attention suggests that the amount of attention that can be utilized at one time is limited. In addition, the amount of attention that is required for performing multiple tasks depends on the demand of each activity being performed in isolation (Tze & Chou, 2010). In regard to the use of music in the background while students are performing a reading task and recalling information from a task, the amount of attention the student can utilize during the reading task may be limited. The student may not be able to fully concentrate on the task if there is music playing in the background. However, a study conducted

by Doyle and Furnham (2012), in which the researchers studied whether background music had a distracting effect on creative and non-creative students' reading comprehension, found there was no evidence that music had a distracting effect on either type of students' performance. While music may be a distraction, there is no evidence to suggest whether music will be a distraction in every situation.

Music integration into literacy lessons provide students with concrete, hands-on experiences that are essential to developing each child's ability to reason, think, solve problems, analyze, and evaluate texts (Sze & Yu, 2004). Music can provide students with an opportunity to make connections between a familiar sound and the text they are reading. These connections allow students to better understand what is being read and have better recall. Rhythm skills have been thought to be relevant to reading in both typically developing children and students with a learning disability (Gordon et al., 2015). Music impacts not only students in a general education setting, but also students in a special education setting. A study conducted by Register, Darrow, Standley, and Swedberg (2007) found the students in the study who had been identified as having a specific reading disability made significant gains in their reading comprehension after being exposed to a music intervention treatment.

Music is a teaching tool that can be utilized by teachers to assist all students in the area of reading comprehension. The familiarity of a melody allows students to concentrate fully on a text, and create connections between the familiar melody and what they are reading. However, music with lyrics, whether the song is familiar to students or not, causes students to become distracted. Classical music, or music without words, does not compete with students reading comprehension enhancing students' ability to comprehend a text. Music also has the ability to change the way students read and comprehend text, which in turn may impact the way in which

students view reading; change in attitude towards reading may solve more problems than intended.

Methodology

This study examined how the implementation of instrumental versions of modern day music in a special education classroom might impact students' reading comprehension. Data were collected for a period of six weeks and used a variety of data collection methods. Data was collected using weekly running reading records, a retelling assessment given weekly, a student interview, and observation notes taken during guided reading lessons.

Participants

The participants of this study were selected because they are students in my 6:1:1 seventh and eighth grade special education classroom for the 2016-2017 school year. At the time of the study, the class was composed of four boys who are all Caucasian. All students in the class spoke English as their first language. There was one student who was reading at grade level, one student who was reading one to two years below grade level, another student reading at a third grade level, and one student reading at a first grade level. My classroom ran under a co-teaching model in which another teacher and I shared responsibilities for instruction. I was the sole instructor of the content areas of ELA and Social Studies. The student participants were already placed in leveled guided reading groups and remained in these groups during the duration of the data collection process.

Out of the four students in the class, three students participated in this study. Sam was a twelve year old, seventh grade boy with Autism. He was reading at a first grade level. He has

difficulty with reading and quite often becomes frustrated while reading. Devon, a twelve year old, seventh grade boy with Attention Deficit Hyperactivity Disorder (ADHD), was reading at a fifth grade level. He expressed ELA was not his favorite subject and he did not enjoy reading as a whole. Henry was a thirteen year old boy diagnosed with Autism in eighth grade. He was reading at a seventh grade level, and expressed a great interest in reading.

Setting

The setting for this study was in a 6:1:1 seventh and eighth grade special education classroom in a rural school that included students in K-12 and was located in New York State. The classroom environment was vibrant with many different and colorful anchor charts posted throughout the room. Each student had his own personal area for his desk, which was marked using colorful masking tape. There was a classroom library in the back corner of the room, which provided students with an opportunity to choose appropriate books for independent reading. There was also a comfy corner in which students could read their books sitting in a bean bag chair, on pillows, or in a comfortable chair. Guided reading groups took place in the center of the room on a rug with beanbags for sitting. Each group contained one student and was tailored to meet the needs of the student at his specific reading level.

The school was located in a rural area in Western New York. The town was about an hour from a local city. The district's residents consisted of primarily blue-collar workers who are in the lower and middle socioeconomic status. According to Data USA (2014), the population of the community was predominately white with approximately eighty-three percent of the community members identifying as Caucasian, twelve percent were Hispanic, and approximately

two percent were African American. The main language spoken in the town was English, but the second main language spoken in the town was Spanish.

According to the 2015-2016 New York State Report Card (New York State Educational Department, 2016), there were 524 students attending the school. Out of those students, approximately sixty-six percent of the students were white, approximately twenty-four percent of students were Hispanic or Latino, approximately five percent of students were African American, two percent of students identified as being multiracial, and one percent identified as Asian or Native Hawaiian. The percentage of males attending the school was slightly higher than females with fifty-four percent of the student population being male while forty-five percent being female. Nine percent of the student population was comprised of English Language Learners. Students with disabilities accounted for nineteen percent of the student population, and seventy-one percent of all students were economically disadvantaged.

Positionality

I was raised, and continue to live, in a rural area similar to the one in which my students live. I have similar demographics as those who are involved in the school in which I work. I am a Caucasian woman in my early twenties and completed my Master's Degree in Literacy Education at a local college. I received my Bachelor's Degree in Childhood Education and Special Education from a small private college in a rural area in New York State.

At the time of this study, I was a first year teacher working in a 6:1:1 seventh and eighth grade special education classroom in a rural school district. I believe all students should receive the best education possible that is tailored to their learning styles. Students should be given the support they need in order to be successful not only academically, but also socially. I believe it is

my duty as an educator to provide my students with the support they need in order to achieve their academic and social goals.

Methods of Data Collection

I conducted a qualitative study and collected data through weekly running reading records, retelling assessments given to students weekly, a self-written interview given to students at the end of the study, and observation notes, which were taken during daily guided reading lessons.

When I conducted running reading records, I used passages that corresponded with each student's reading level. Each running record indicated students' ability to focus on the text while the music was playing in the background. After the student had completed reading the passage, I had the student retell what they had just read. I used a retelling assessment to measure each student's reading comprehension. The assessment scored eight different aspects of the story, which students should have included in their retelling. Students received two points for every aspect of the story retold correctly without prompting and one point if the student retelling the story needed to be prompted. The maximum amount of points a student could earn was twenty.

I also conducted student interviews to gain information regarding students' thinking and response to the incorporation of music into guided reading lessons. The interviews included questions that asked students to indicate if they found the music distracting, if the music assisted their reading in any way, and their overall thoughts about utilizing music in the background during guided reading lessons. I recorded the interviews using a password protected device.

During each guided reading lesson, I made observation notes indicating how students reacted to the incorporation of music during each guided reading lesson. I noted if the student

made any comments related to the music and if the music seemed to be distracting. Through these observations, I also noted how students' reading comprehension was affected by the music. As students read during guided reading lessons, I often informally checked for comprehension by asking a variety of questions. Through the use of a double journal entry, I made notes in regard to students' responses to these informal questions.

Procedures

Students participated in their daily guided reading groups, which have been a part of their classroom routine since the beginning of the year. During each guided reading session, I had instrumental versions of songs familiar to students playing in the background. Students participated in their thirty-minute lesson as normal, except with the music playing in the background. During each lesson, I took observational notes in a designated notebook noting any comments students made related to the music, if the students appeared to become distracted by the music, and their general response to having music played during the lesson. These observations allowed me to understand if the music was more distracting to students or if the music was beneficial in regard to improving students' reading comprehension.

Each week I conducted a running reading record (Appendix A). Students were given a passage that was appropriate for their grade level. While students read the passage, I indicated any miscues made during the reading. The music was also played while the students were reading their passages. After the students completed the reading, I made notes on the running record about the students' overall reading and any implications related to having the music play. When the students completely read the passage, they completed a retelling assessment (Appendix B). The students were asked several questions examining how well they comprehended the story.

The assessment scored eight different aspects of the story that students should have included in their retelling. Students received two points for every aspect of the story retold correctly without prompting and one point if the student retelling the story needed to be prompted.

At the end of the study, I conducted a short interview (Appendix C) with the students who participated. The interview consisted of questions asking students their thoughts on playing music during their guided reading lessons, their thoughts in regards to how helpful the music was in their reading, if they thought the music helped them remember what was read, and if there was anything that bothered them in regards to having music play.

The way in which the data collected from the study were analyzed was through the constant comparison method. This method involved developing themes from the data collected throughout the study and using these themes to create a theory (Shagoury & Power, 2012). I began my analysis by looking at students' retelling assessments, running reading records, interviews, and observation notes individually. I used a coding system to mark each piece of data exhibiting certain themes. After coding the data, I looked at the themes that had developed across all the data and developed my findings based upon these commonalities.

Trustworthiness for this study was established through the use of triangulation, or the process of validating evidence about a finding from different types of data (Clark & Creswell, 2015), in order to analyze the multiple kinds of data collected throughout my research. My work was examined by my research partner and capstone project advisor,

Analysis

This research was designed as a qualitative study on the impact of instrumental versions of modern day songs on students' reading comprehension. Through the use of running reading

records, retelling assessments, classroom observations, and an interview, I analyzed the way in which playing instrumental music during guided reading lessons impacted my students' overall reading comprehension. As a result of the data analysis process, I categorized the data into common themes encompassing the impact of instrumental music on students' reading comprehension.

I used a coding system in order to interpret and analyze my data. First, I transcribed the audio recordings of students' retellings. When transcribing the retellings, I ensured to date each conversation to show when the retelling took place. After I completed the transcriptions, I looked at each student's retellings individually. I began by looking at both the students' retelling assessments and the transcriptions of their retelling and analyzed how students' scores improved over the course of the study. I looked specifically at the questions in which students received a one or zero, which indicated the student either needed to be prompted or could not answer the question at all. I used a color coding system to identify how many prompts a student required during his retelling.

Next, I analyzed students' running reading records. I categorized the running records by the reading sessions in which students' records indicated if the student was distracted by the music that played in the background. I coded the instances in which students seemed most distracted by the music and instances in which students did not seem to notice the music at all. I then coded my observation notes to indicate the sessions in which students made specific remarks to the music that played in the background. Through constant comparison, a data analysis method, which involves deriving categories from data over time and using these categories to build theories (Shagoury & Power, 2012), I compared the instances in which

students' running reading records indicated they were distracted when reading and the instances from my observational notes in which students made specific comments towards the music.

Finally, I examined each student's interview individually. I coded the data using a similar method as with the running records, retelling assessments and observation notes. I used constant comparison to determine patterns among the students' responses. I marked similar answers among each student and used these codes to develop themes.

The purpose of my study was to determine the impact instrumental versions of modern day music had on students' reading comprehension. I looked to research the impact of music on students' reading comprehension as a technique to better support my students who have difficulty in the area of reading comprehension.

Through my data analysis, I discovered several themes, which emerged throughout my various pieces of data. I found that the amount of prompts students required to assist in their retelling decreased the more they were exposed to the music. Also, during each session, the music impacted students' mood which in turn impacted students' comprehension of the text. As a result of being exposed to the instrumental music, the students' overall reading comprehension increased. However, the ways in which the students' comprehension increased differed between each student.

Finding One: The number of prompts a majority of the students required to assist their retelling decreased the more they were exposed to music.

When students have difficulty in the area of reading comprehension, they often require several prompts to assist in their recall of the text. Students may be able to tell the teacher the character in a story was a girl, but they have a difficult time remembering the girl's name. When I first started collecting data, the number of prompts my students required to complete their

retelling was significant. The following sections will discuss Sam, Devon, and Henry's experiences regarding prompting throughout their retellings.

Sam

Sam, who has extreme difficulty recalling events in a story, required five prompts in order to complete the recall assessment. The prompts he required were essentially asking him to expand upon his initial answers. The following conversation took place after one of Sam's first retellings.

Miss Bird: Tell me about the story.

Sam: I don't know. The story was about chickens.

Miss Bird: Who was in the story?

Sam: Um, the mom was sick, and she tried to make a chicken, and it didn't work.

Miss Bird: The mom tried to make a chicken?

Sam: No, the girl, and it didn't go her way, and she made pizza. The end.

Miss Bird: Where was she making the chicken?

Sam: In the oven.

Miss Bird: Was she at her grandma's house or at her own house?

Sam: Own house.

As evident in this conversation with Sam, he had to be prompted for the whole story. He had difficulty simply telling the main point of the story. He believed the whole story was about chickens; in reality, the story was about a girl who was attempting to cook a chicken for her sick mother. The score of Sam's retelling for this particular story reflected the amount of prompts required. He scored a seven out of sixteen which indicates that he received a majority of ones.

However, as Sam was exposed to the music, the amount of prompts he required began to decrease. Within a week of being exposed to the music, Sam was able to tell a story with only being prompted three times. The prompts that Sam required were more specific to the story and information he had already provided. The following conversation is from a story Sam read within a week of the conversation mentioned above.

Miss Bird: Tell me about the story.

Sam: There's this guy named Paul and he got a cookbook for his birthday, and he made tomato salad, and he had beef stew, and that's pretty much it.

Miss Bird: What did he make for breakfast?

Sam: Oh pancakes! Blueberry pancakes.

Miss Bird: Who gave him the cookbook?

Sam: His mom.

Miss Bird: Ok, and do you remember where he got any of his ingredients?

Sam: From the farmer's market and the garden.

While the amount of prompts Sam required did not decrease significantly, they did still decrease. As evident in the retelling above, Sam was providing more information, which allowed the prompts given to be more specific to the information he already stated as opposed to one of his first retellings. In Sam's first retelling, the prompts given were more general asking Sam to tell more about the story. However, a week later, Sam was able to be more specific in his retelling, and the prompts given were asking Sam to elaborate on his initial statements. Sam's ability to be provided with less prompts was also evident in the score of his retelling for this story. Sam received a score of fourteen out of sixteen. This indicated that Sam received a majority of twos when scoring each element.

Sam's final retelling exhibited he no longer needed any prompts for his retelling. While he did not receive a perfect score, Sam still earned a fourteen out of sixteen. As evident in the following conversation from Sam's final retelling, he did not need a single prompt to complete his retelling connecting to the fact that his reading comprehension was increasing.

Miss Bird: What was this story about?

Sam: There was this girl named Bella, and she was scared of the doctor. She had to get her ears checked. They hid behind the sofa and it was the dog she brought behind the sofa, and the dog made a noise and she checked behind the sofa and there was the dog, and then the mom went to reach out her hand. The end.

Miss Bird: Good job bud.

Devon

Devon presented similar results in his initial retellings as Sam. In one of Devon's first retellings, he only received a three out of sixteen indicating that he either scored zero or one on each element. The following conversation was from Devon's retelling associated with this score.

Miss Bird: Tell me about the story please.

Devon: Well in the story there were these geese, and they were migrating south for the winter, but um, one of them almost got eaten by an eagle, and his brother got really shaken up.

Miss Bird: Do you remember his name?

Devon: No, I don't remember his name.

Miss Bird: Do you remember any of the characters?

Devon: Lucy and Shane.

As evident by Devon's retelling, he barely remembered anything about the story. He was only given three prompts, but as he indicates by the short and vague initial retelling, he did not remember much about the story. He was able to name the setting of the story, indicate that the characters were geese, stated a problem, and name secondary characters. However, he had difficulty discussing the main character of the story, the resolution of the problem, and the theme of the story.

However, after a week of being exposed to the music, similar to Sam, the amount of prompts Devon required decreased. The following conversation is from a retelling a week after Devon's first retelling in which he scored poorly.

Miss Bird: Tell me about the story.

Devon: This story was about a girl that had to go to the hospital because her grandmother was sick, and on one of her trips, she noticed there was a bunch of wildflowers, and every time she went to the hospital to visit her grandmother she pulled over. The first time I mean she pulled some out of the ground and after she brought scissors with her and would snip some out of the ground when she went to the hospital to visit her grandmother and all that. One day, she got a call from the hospital saying her grandmother had taken a turn for the worse, and she sped right past the flowers, and she decided to turn around and go back to clip some for her grandmother, and when she got to the hospital her grandmother was unresponsive, and she felt a squeeze of her hand and that was the last conversation her and her grandmother ever had.

Miss Bird: Alright, what was the girl's name?

Devon: I don't remember her name.

The amount of information Devon provided in this retelling increased, which resulted in the amount of prompts to decrease. While he did not remember the name of the main character, he was able to score a fourteen out of sixteen. This indicated Devon was able to touch upon a majority of the elements without being prompted. Devon showed a significant increase in the amount of information he was able to provide in his retelling, which lead to a decrease in the amount of prompts needed for him to complete his retelling.

Devon's final retelling revealed he did not need a great deal of prompts to complete his retelling. He only required two prompts in order to complete his retelling. Devon incorporated more information into his retelling. He still had difficulty including characters' names in his retelling. However, he was able to include the problem and solution of the story and was able to tell the story in sequential order.

Henry

Henry has higher reading comprehension skills than Sam and Devon, but he did show a decrease in the amount of prompts he needed to complete his retelling. In his first retelling, Henry required three prompts to complete his retelling. Unlike Sam and Devon, Henry's prompts for his first retelling here more specific to the information he had already provided. He had initially provided a detailed retelling but did not touch upon a couple of the elements.

Considering Henry needed three prompts, he still scored a thirteen out of sixteen. This score shows Henry was able to receive twos on a majority of the elements scored, indicating he did not need to be prompted as much. However, after being exposed to the music, Henry scored a sixteen out of sixteen on his final retelling. He provided a detailed, rich retelling and did not require any prompts. Henry was able to touch upon all the elements without being prompted to elaborate on his retelling.

After being exposed to instrumental versions of modern day music, all students showed the amount of prompts they required to complete their retelling decreased. The amount of prompts required for some students did not decrease drastically, but the decrease indicated students were providing more detailed retellings. A majority of the students' initial retellings were vague and did not touch upon many of the elements being scored. After a week of being exposed to music, the students were able to recall more information resulting in the amount of prompts given to decrease. In conjunction with the Mozart Effect, the exposure to the instrumental music increased the students reading comprehension leading to the decrease in prompts. Students were utilizing the music, whether conscious of this or not, to focus on the text allowing them to recall more information.

Finding Two: Students' moods were impacted by the music playing, which in turn impacted their ability to comprehend what was being read.

When students entered my guided reading group in a negative mood, they tended to do more poorly on their retellings. However, when students were in a positive mood, their retelling scores increased. There were several participants who stated the music that was playing had an impact on their overall mood. The following sections will discuss how the music impacted Sam, Devon, and Henry's moods as a whole and how this in turn impacted their reading comprehension.

Sam

Sam tended to become more anxious during ELA time as he has difficulty with reading. However, there were several times when Sam would enter my guided reading group in a positive mood. On these days, Sam's scores reflected his positive attitude. For example, as observed on

March 7, Sam was in an extremely positive mood. When he read the passage *Paul Cooks*, he received a fourteen out of sixteen on his retelling, and was able to receive points on all of the questions.

As previously stated, ELA was a difficult subject for Sam and quite often caused him much anxiety. Therefore, a majority of the time, when it came time for him to read with me during his guided reading time he would express more resistance to reading. There were times when Sam would come into my group and make statements such as, “I’m not going to read,” or “I don’t want to read today.” During these times, I would give Sam a few minutes to collect himself before we began reading. On March 10, Sam entered my group in one of the most agitated states I had experienced with him during the course of the study. He stated he did not want to read and suggested he listen to the first song playing from the speakers before he began reading. The song playing was the Piano Guys’ version of *A Thousand Years*, which is a slower song. When the song had finished, I inquired if Sam was ready to begin reading. He stated he still did not want to read and wanted to listen to another song. The next song that played on the Pandora station was the instrumental version of *What Makes You Beautiful*, which is a more upbeat song. As the song continued to play, Sam began to rock along with the beat. By the time the song had ended, Sam was much calmer than he had been when he first entered my group. Sam agreed to read the passage chosen for the day. The whole time he read, he rocked along to the beat of the music playing in the background. Sam received an eleven out of sixteen for his retelling.

A similar incident occurred several days later. Sam entered my guided reading group in a poor mood. He had just had an altercation with another student and was still focused on what had taken place with the student. Sam did not ask to listen to the music first, but rather stated he

wanted to read to get it over with. It was evident in Sam's reading at the beginning that he was still frustrated. He was not attempting to read words he did not know or make corrections if something sounded incorrect. However, as Sam continued to read the passage, a song he recognized came on the Pandora station. Sam began to rock along to the beat of the familiar song, and by the end of the reading, Sam was in a more positive, calm state. He asked to read the passage again now that he was feeling calmer and received a fourteen out of sixteen on his retelling. His retelling was also more detailed than some of his retellings from previous days. The following conversation was from the same day as the aforementioned meeting with Sam.

Miss Bird: Tell me about the story.

Sam: There's this guy named Dieter, and his legs hurt, his arm hurt, and his back hurt, and his whole body hurt, and he started dreaming, and he felt better.

Miss Bird: What was he doing that made his whole body hurt?

Sam: I don't know.

Miss Bird: What does Dieter love to do?

Sam: Run.

Miss Bird: So what made his body hurt?

Sam: When he run.

This was a shorter passage, which in turn created a shorter retelling. However, Sam was able to state the main character, the problem, the solution, and told his retelling in sequential order. Typically, when Sam was in a negative state, he would give a retelling that provided less detail. However, as seen from the conversation above, due to the music's impact on Sam's mood, he was able to give a more detailed response.

Devon

Devon expressed a similar pattern as Sam. When Devon would enter my group in an agitated state, he tended to do poorly on his retellings. For example, as observed on March 17, he had an altercation with another staff member and entered my group still upset from the incident. We were in a different location in the classroom as Devon did not feel he could sit in our usual spot as he thought he would do better standing at our tall table in the back of the room. Devon proceeded to read the passage *The Astronomy Project* and received a six out of sixteen on his retelling. This was an unusual score for Devon by this point of the study even for being in an agitated state. I inquired why Devon thought he had a difficult time with the retelling, and he stated that it was because he was agitated. I asked if the music had made him more agitated, in which he replied that he could not really hear the music at all.

A couple days later, Devon entered my group in an agitated state again. We had returned to our usual spot for guided reading. I ensured to ask Devon if he was able to hear the music, and he replied that he could hear the music “just fine.” Devon began to read *Alex and Amanda’s First Concert*, and it was evident by Devon’s reading that he was still in an agitated state. However, as he continued to read, he began to become calmer. The following conversation is Devon’s retelling for this particular passage.

Miss Bird: Tell me about the story.

Devon: The book was about this brother and sister that wanted to go to a concert really bad, so they begged their parents to let them go because the band wouldn’t go on tour again for another three years, and they didn’t want to wait another three years, so they begged their parents, and their parents said yes. And then they went to the concert, and

knew what their older sister meant by a good experience listening to the band because they couldn't even hear themselves talking.

Miss Bird: Did the parents have conditions for letting the kids go?

Devon: They had to get an A on their next book report, they had to pay for their own tickets and their older sister and older sister's friends tickets.

Miss Bird: Did the parents say that last part?

Devon: No.

He received a twelve out of sixteen on this retelling. Devon had given a much more detailed retelling than he had a few days earlier when he had also entered the group in an agitated state. I asked Devon why he thought he had calmed down as he continued to read his story. He replied with the following statement, "The music was upbeat and helped me concentrate better."

When interviewed at the end of the study, Devon expressed several times that the music assisted his reading in the way of impact the music had on his mood. The following conversation took place during Devon's interview.

Miss. Bird: How did the music help your reading?

Devon: I think it helped me because I liked having a little bit of noise.

Miss. Bird: Does having a little bit of noise help you concentrate and keep you on task, or does it distract you?

Devon: On task and focused.

Miss. Bird: How did the music make you feel?

Devon: The same.

Miss. Bird: When you came over here and you were feeling anxious or frustrated, did the music help you calm down at all?

Devon: (Smirking) Maybe just a touch.

As evident by the conversation that took place during Devon's interview, he recognized that the music not only assisted him in concentrating on the text that was being read, but also impacted his mood. When asked about the music calming Devon down when he felt anxious Devon made clear not only by his words, but also by his facial expressions, that the music did have a positive impact on his mood.

Henry

Similar to Sam and Devon, Henry expressed that the music impacted his mood, which in turn impacted his ability to recall the text. When Henry was in a positive mood, he was able to score perfect scores on his retellings. However, during our session on March 20, Henry, who was in a positive mood, made a comment about the music that was playing in the background while he read the passage *Seeing Through*. He stated that the calmer music made him "more sleepy," and it was harder for him to concentrate on the passage as he was always yawning. On this particular retelling, Henry received an eleven out of sixteen, which was his lowest retelling.

Two days later when Henry and I worked together again, he was in a positive mood. He seemed to be awake and alert. However, I made sure to play upbeat music nonetheless due to his comment from our previous session. Henry read the passage *Accused* without yawning once and received a sixteen out of sixteen on his retelling. I inquired Henry why he thought he might have done better on this retelling than the last one. He stated that he was not as sleepy this time and was able to concentrate better. I followed up by asking Henry if he thought the music was better

during this session. He replied by saying, “Oh yes. The music was much more upbeat, and I was able to concentrate better because I was not yawning as much.”

Henry’s interview at the end of the study also indicated that the type of music that was played in the background impacted Henry’s mood and ability to concentrate. The following conversation took place during Henry’s interview.

Miss Bird: How did the music help your reading?

Henry: Well it made me more sleepy, so it negatively affected me.

Miss Bird: Was it all of the music?

Henry: Most of it. The slower music. The slow, calm music makes me sleepy.

Miss Bird: How do you feel about instrumental music playing when you read?

Henry: It’s good as long as it’s not the slow, calm type because it makes me sleepy.

Miss Bird: Did you feel more calm or more anxious when the music was playing?

Henry: It makes me calm because that made me sleepy. It made me too calm.

Miss Bird. If we were to do this all over again, what is something you would have me change? What do you think would help you more?

Henry: Nothing really except like I said the music, but other than that, everything was good.

Miss Bird: What about the music would you change?

Henry: The tempo. Make it more energetic so I wouldn’t be so sleepy.

As evident in Henry’s interview, the music had an impact on his mood, which as he expressed, impacted his ability to concentrate. Henry stated several times the music made him sleepy. As Henry states in his interview, when the music made him sleepy, this affected him negatively. He was not able to concentrate as much; therefore, he was not able to recall as much information.

Throughout the course of the study, the students expressed in different ways that the music impacted their mood. Similar to the findings of Stalinski and Schellenberg (2012), when students were in a positive mood, their comprehension increased as opposed to the decrease in comprehension when they were in a negative mood. Sam expressed through his actions that the music was able to calm him down when he was feeling agitated. Devon expressed both through his actions and discussions that the music helped him feel calm. Henry had several discussions throughout the study in which he made reference to how the music made him sleepy, and in turn, he was not able to concentrate. The instrumental versions of modern day music had more songs that were upbeat and provided students with a beat to rock to, if necessary, or allowed the students to feel more energetic or alert. Whether the music made students feel calmer or feel too calm at times, the music did have an impact on their mood, which in turn impacted their retellings.

Finding 3: After being exposed to instrumental versions of modern day music, students reading comprehension increased.

When I examined students' retelling scores from their first retelling to their last, all the students' scores improved. Some students made small gains in their scores while others made significant improvements. However, different aspects of each student's reading comprehension improved as well. The following sections will discuss each student's individual improvements over the course of the study.

Sam

At the beginning of the study, Sam exhibited low scores on his retelling assessments. His first retelling score was a four out of sixteen. Sam had a difficult time recalling certain

information from the text, specifically the problem, solution, and theme. Sam also had difficulty retelling the story in sequential order. He would often jump around the story or be in the middle of discussing one part of the story then make statements such as, “Oh yeah, I forgot to talk about this.” However, Sam’s final retelling assessment showed he earned a fourteen out of sixteen. He was able to earn a two on all of the items except for one. Sam’s oral retellings were also more detailed as the study continued. The following conversation is a retelling from the first week of the study.

Miss Bird: Tell me about the story.

Sam: I don’t know. The story was about CHICKENS!

Miss Bird: Who was in the story?

Sam: Um, the mom was sick and she tried to make a chicken and it didn’t work.

Miss Bird: The mom tried to make a chicken?

Sam: No, the girl and it didn’t go her way and she made pizza. The end.

Miss Bird: Where was she making the chicken?

Sam: In the oven.

Miss Bird: Was she at her grandma’s house or at her own house?

Sam: Own house.

Miss Bird: And then what did she do?

Sam: She ordered pizza.

As evident by this retelling, Sam did not provide much detail in his initial retelling. He had to be prompted a great deal in order to have him present more information on the text. The problem and solution of the story were presented, but only after being prompted. The story was told in sequential order, but only due to the prompts that were given to Sam.

In contrast to his first retelling, Sam received a fourteen out of sixteen on his final retelling. Sam was able to state the problem, resolution, and told the story in sequential order. The following conversation was from Sam's final retelling.

Miss Bird: What was this story about?

Sam: There was this girl named Bella, and she was scared of the doctor. She had to get her ears checked. They hid behind the sofa, and it was the dog she brought behind the sofa, and the dog made a noise and she checked behind the sofa and there was the dog, and then the mom went to reach out her hand. The end.

Miss Bird: Good job, bud.

As evident by this retelling, Sam's recall skills have increased. He was able to provide a detailed initial retelling. He provided information that had been missing during the first week of his retellings. He was able to provide the problem and solution without being prompted. He was also able to retell the story in sequential order. In addition, he did not require any prompts from the teacher. As evident in the data, Sam's retellings increased each week he was exposed to the music showing his reading comprehension as a whole improved.

Devon

Similar to Sam, Devon had a lower score on his retellings at the beginning of the study as opposed to the end of the study. Devon's score from his first retelling to his last was not a significant increase, but his score still increased. On Devon's first retelling, he earned a twelve out of sixteen. Devon was able to provide a detailed retelling during his first session. However, the proceeding days the first week of the study exhibited that Devon had a difficult time recalling the information he read. During the second session, Devon had a difficult time recalling the information from the text he read. He would begin to say something but quickly change the piece

of information to the opposite. He became confused quite easily and did not seem confident in his retelling. He did earn a ten out of sixteen on this reading, but he did have difficulty with recalling information. The following conversation is from the second session with Devon.

Miss Bird: Tell me about the story.

Devon: Um, there was this kid that did, um, that didn't I mean that did like snowboarding, but he didn't like warm weather, and his family was going on a cruise, but he wanted to stay home, and stay at his friend's house so he could go snowboarding all week for their winter vacation, and um he actually liked the cruise, and he got new friends and learned to do a new sport: surfing.

Miss Bird: Did the boy have a name?

Devon: Um, I don't remember.

Miss Bird: That's ok. If you don't remember that's fine. Did they say where they were going on the cruise?

Devon: No.

Miss Bird: Nice job. You are all done.

While Devon was able to give some detail, he did leave out a great deal of information from the passage. He did not mention any information about the cruise ship other than there was surfing available to passengers. He did not discuss the main character's parents and how they influenced the main character's trip once they were on the cruise ship. In Devon's early retellings, he had the pattern of leaving out important details or events from the passages.

However, as Devon progressed through the study, his retellings became more detailed and he was providing all important information from the passage. He was able to recall more information overall, but his ability to identify the problem and solution of a passage increased.

Devon's final retelling showed his ability to identify the problem and solution increased, as well as the amount of important information he included in his retellings. The following excerpt is Devon's initial retelling, meaning before he was provided with any prompts, from his final retelling.

Devon: The story was about a girl and her brother that wanted to go out and play, and they wanted to see who could clean their room the fastest, and when they got done cleaning their rooms they went outside to play. After they were playing outside for awhile they wanted a piece of pie, so they came back inside the house, and when they got into the house and looked at the pie, the pie was a mess, and they were trying to figure out why the pie looked like a mess, and they found out that the bird ate the pie.

Devon's initial retelling was more detailed filled and included all the important pieces of information from the text. He discussed the characters and the setting but most importantly the problem and solution. He also told the story in sequential order. Devon showed an increase in his ability to comprehend what was read and discuss the literal information from the text.

Henry

While Henry's reading comprehension did improve, his reading comprehension did not improve in the same way as Devon and Sam's. Since the beginning of the study, Henry's literal comprehension has excelled. He has been able to provide literal information such as the characters' names, the setting, the problem, and the solution. The area of reading comprehension in which Henry had the most difficulty with was thinking implicitly about a text or reading between the lines and evaluating a text, in other words, thinking beyond the text. However, over the course of the study, Henry exhibited he was thinking more critically about the text.

During one of Henry's earlier sessions, while reading the passage *Remains of a Marriage*, Henry questioned the text while he read. While he was reading the text, he did not understand why the husband was calling the wife selfish. He had an elaborate conversation about how the wife wanted to move the house to a different location and was thinking about the people who were buried in the Indian burial ground. He used several "I wonder" statements, such as "I wonder why he thinks she is being selfish," and "I wonder how she feels being accused of being selfish when she really isn't." As Henry continued to read the story, he realized the husband was really the one who wanted to move the house and was being respectful. He made the comment, "Oh, I guess I answered my own question."

During this same reading, Henry made a connection between the text and his own life. He did not talk about his personal life specifically but rather connected the text to a movie he had seen before. He said the story reminded him of the plot of the movie, and while Henry did become sidetracked and discussed the plot of the movie, he was making comparisons between the story and movie throughout his synopsis of the movie.

Henry's last session of the study showed he was thinking more deeply about the text. The passage in which Henry was going to read was titled *Accused*. After handing Henry the passage, he said, "Well I predict this story is going to be about someone who gets accused of doing something they didn't do because that's what always happens when someone is accused of something." After Henry had finished reading the passage, before beginning his retelling, he said, "Yep I knew it. My prediction was right. Are you ready for me to tell you why?" This was the first time in all of my sessions in which Henry made the slightest attempt to make a prediction. This showed he was truly thinking critically about the text.

As evident in the data, Sam, Devon, and Henry's reading comprehension improved throughout the course of the study. While the three participants' reading comprehension improved in different ways, they all showed improvements. Sam was able to include more literal information in his retellings and recall information in sequential order. Devon was also able to include more explicit information from the text in his retellings and was able to construct more detailed retellings. Henry was able to think more critically about a text by questioning the text, making predictions, and making connections between the text and experiences he has had in his own life. Throughout the study, the students were exposed to the same songs on the Pandora station meaning they were exposed to similar rhythmic patterns. The exposure to familiar music allowed the students to make connections between the text and the song. This connects to Purnell-Webb and Speelman's (2008) notion that familiar rhythmic patterns act as mnemonic device for students. The participants were familiar with the different songs, and while they may not have been conscious of the fact that the music was acting as a mnemonic device, they were making connections between the music and the information they were reading in the text.

Through the analysis of the data, several different patterns emerged. Through the exposure to the instrumental versions of modern day music familiar to the students, the students exhibited an increase in their reading comprehension. They were able to make different strides in different areas of comprehension. The students also required less prompts during each reading showing their comprehension was increasing as well. If a student did not require a prompt for a certain item being assessed on the retelling assessment, this meant the student included the information in his retelling. Since the students were including more information in their retelling, this showed they were comprehending the text better. Lastly, students' mood had an impact on their comprehension. When students were in a more negative state, their comprehension

decreased. However, the music assisted students in feeling calmer, which increased their mood leading to an increase in their reading comprehension. There were times the students felt too calm, which in turn decreased their reading comprehension. The music had an impact on the students' mood, which would impact their reading comprehension either positively or negatively. Either way, students' reading comprehension was still being affected by the music, and a majority of the time, this was in a positive manner. The amount of prompts decreasing and the mood of the students resulted in an increase in reading comprehension. However, the common thread throughout the data analysis was that music exposure, in this case instrumental versions of popular songs, increased students' comprehension.

Discussion

The purpose of this study was to examine the impact of playing instrumental versions of modern day songs during guided reading lessons and the impact it had on students' reading comprehension. This study was focused around the following research question:

- *How might the incorporation of instrumental versions of modern day music during guided reading lessons impact adolescent students' reading comprehension?*

During this four week study, I found that the seventh and eighth grade students showed improvements in their reading comprehension after being exposed to the instrumental music. The improvement in students' reading comprehension was not limited to students of a certain reading level, showing playing instrumental music can have an impact on students' reading comprehension despite their reading ability.

Data analysis revealed that as students were exposed to the instrumental music, their reading comprehension as a whole improved. The number of prompts students required to assist

in their retellings of texts that they had read decreased over the course of the study, showing that the amount of information students were recalling after reading the text had increased. The integration of music into guided reading lessons provided students with experiences that assisted in the development of the students' ability to reason, think, analyze and evaluate a text (Sze & Yu, 2004). There were certain participants who improved in literal comprehension while others improved in higher levels of comprehension, such as thinking implicitly about a text or evaluating a text. Data also showed that the music that was playing in the background during guided reading lessons assisted in relieving students' anxiety and created a calm, positive learning environment. Listening to music can produce an ideal amount of adrenaline in the brain, causing high stimulation, which improves students' mood and overall attitude (Langan & Sachs, 2013). While listening to the music, the students' mood improved, which led to enhanced recall of the texts in which they were reading. The incorporation of instrumental versions of modern day music proved to be a tool students could utilize to help in relieving their anxiety over reading and improve upon their reading comprehension.

Conclusions and Implications

Conclusion 1: Instrumental versions of modern day music seem to support improved reading comprehension.

The results of this study indicated that students' reading comprehension as a whole improved when exposed to instrumental versions of modern day music. When the melody being played was familiar to students, there were fewer cognitive resources required to process a text, so more resources were available to store material in their memory (Purnell-Webb & Speelman, 2008). Therefore, students utilized the music as a tool to assist their reading comprehension. The

results of the study also indicated that students did not require as many prompts to assist in their retelling of the text after being exposed to the music. The students retained more information, which in turn caused them to produce more detailed rich initial retellings. The familiar music acted as a mnemonic device, which allowed the students to make connections between the music they were hearing and the text they were reading (Purnell-Webb & Speelman, 2008). In short, students can utilize the music as a tool to make connections between the music and the text, increasing their comprehension as a whole.

Implication 1: Teachers can use instrumental versions of modern songs as a tool to assist students' reading comprehension.

Reading comprehension is an area in which many students struggle on a daily basis. Thirty percent of children have been found to have difficulty in reading, which in turn impacts their reading comprehension (Register, Darrow, Standley, & Swedberg, 2007). Teachers give students a variety of strategies to assist their reading comprehension, but music can be a tool that teachers can utilize to support the teaching of those strategies. Teachers can create playlists in which they can associate certain songs with certain strategies. When students are having difficulty comprehending a text, teachers can refer back to a song that will be associated with a certain comprehension strategy. A previously determined rhythmic pattern may provide students with a schematic frame, which students can utilize to make associative links between the songs and strategies (Purnell-Webb & Speelman, 2008). Music can be a powerful tool that can act as a bridge between students' memory and the text that they are reading.

Conclusion 2: Instrumental versions of modern songs can calm students when they are feeling anxious.

The data collected in this study demonstrated how music can calm students when they are feeling anxious. Reading is an area of difficulty for many students and causes them anxiety. When students are required to read something out loud, they may become apprehensive as they do not have strong reading skills. Instrumental versions of modern songs allow students to feel more comfortable in their environment. Over the past decade, neuroimaging studies have demonstrated that music influences brain structures involved in emotion and associative learning (Armstrong, 2016). Therefore, the music that students are exposed to has an impact on students' emotions and their learning as a whole. When students' emotions are stable they will have a more meaningful learning experience.

In addition, calm, peaceful environments have been found to help students in different areas of learning, including their reading comprehension (Rashidi & Faham, 2011). Music can assist in creating this calm environment. The right type of music can help make the students less stressed, more relaxed, happier, and even more productive (Tze & Chou, 2010). The results of this study show that music that is familiar to students allows them to feel calmer when they are anxious, especially during guided reading groups. Music familiar to the students can provide a sense of security and predictability (Hendon & Bohon, 2007). If students feel a sense of security, they are more likely to be in a calm state that will have a positive impact on their learning.

Implication 2: Students should be offered the choice of listening to instrumental versions of modern day music when they are feeling anxious.

When students are feeling anxious, or are in a negative state of mind, their learning is going to suffer. Students have a difficult time concentrating when they are worried about if they are going to say the wrong word when reading aloud to the teacher or a group. When students become anxious, they should be offered an option to help calm themselves. Music listening experiences provide an appropriate way to positively influence stable moods (Lesiuk, 2010). Listening to music allows students to become regulated and return to a stable mood. When students are anxious, they are insecure and not focused on the task at hand. However, music allows students to regulate themselves and return to their stable, positive mood state. Music can be therapeutic to students, especially students with disabilities. The therapeutic purpose of music has been found to contribute to the health and overall quality of life for children with disabilities (Hendon & Bohon, 2007). This also includes students' learning in the classroom. Students can utilize the music in a variety of ways. The students can create a playlist using certain songs in which they can listen to when feeling anxious. Creating a playlist allows students to know which song is coming next and allows students to feel more in control. Students can also use the music as a sensory input to help regulate their body. The results of this study found that a student rocked along with the beat of the music in order to regulate himself. There are several different ways in which music can be utilized in order to assist students when they are feeling anxious.

Limitations

The limitations of this study include time, sample size, and member checking. Due to time constraints, the research conducted was completed in a four week time frame. The limited

time frame allowed for a shortened amount of time to collect and analyze the data. In addition, the sample size was small. This research was conducted in a classroom with a total of six students, and out of those six students only three participated. I was also the only researcher conducting the study and was unable to acquire other's perspective or feedback during the collection and analysis of data.

Suggestions for Further Research

Based on the results of my study, I believe there are many benefits to playing instrumental music to support students' reading comprehension. I will continue to play music during my guided reading groups and track my students' progress for the remainder of the year. In the future, I will play the music at the beginning of the school year to support my students' reading comprehension. A suggestion for further research is examining the impact of lyrical music on students' reading comprehension. Since this study was conducted in a special education classroom, another suggestion is to study the impact of instrumental versions of modern day music on the reading comprehension of students in a general education class.

Overall Significance

This study is important as it looks at a tool that can be utilized by teachers to support students' reading comprehension. This is an area in which many students are struggling, and having a tool to support reading comprehension can be beneficial to students. The results of this study show that students' reading comprehension improved after they were exposed to instrumental versions of modern day music. In addition, this study showed that instrumental versions of modern day music assisted students who were feeling anxious. Students' emotions

impact their reading comprehension, and utilizing a tool, such as music, to create a calm environment will have a positive impact on students' learning. This study can be used by multiple grade levels, different classroom environments, and cultures to support the students who are among the growing percentage of students who are having difficulty with reading comprehension.

References

- Armstrong, C. (2016). Music: A powerful ally in your counseling sessions. *Counseling Today*, 58(9), 60-63.
- Anderson, S.A., & Fuller, G.B. (2010). Effect of music on reading comprehension of junior high school students. *School Psychology Quarterly*, 25(3), 178-187.
- DiEdwardo, M.P. (2005). Paring linguistic and music intelligences. *Kappa Delta Pi Record*, 41(3), 128-130.
- Doyle, M., & Furnham, A. (2012). The distracting effects of music on the cognitive test performance of creative and non-creative individuals. *Thinking Skills and Creativity*, 7(1), 1-7.
- Gordon, R.L., Shivers, C.M., Wieland, E.A., Kotz, S.A., Yoder, P.J., & McAuley, J.D. (2015). Musical rhythm discrimination explains individual differences in grammar skills in children. *Developmental Science*, 18(4), 635-644.
- Hendon, C., & Bohon, L.M. (2008). Hospitalized children's mood differences during play and music therapy. *Child: Care, Health & Development*, 34(2), 141-144.
- Kennedy, R., & Scott, A. (2005). A pilot study: The effects of music therapy interventions on middle school students' ESL skills. *Journal of Music Therapy*, 42(4), 244-261.
- Langan, K.A., & Sachs, D.E. (2013). Opening Pandora's stream: Piping music into the information literacy classroom. *Public Service Quarterly*, 9(2), 89-109.
- Lesiuk, T. (2010). The effect of preferred music on mood and performance in a high-cognitive demand occupation. *Journal of Music Therapy*, 47(2), 137-154.
- Meacham, S.J. (2001). Vygotsky and the blues: Re-reading cultural connections and conceptual development. *Theory into Practice*, 40(3), 190-197.

- Clark, V.P. & Creswell, J.W. (2010). *Understanding research: A consumer's guide*. Upper Saddle Ridge, NJ: Pearson Education.
- Purnell-Webb, P., & Speelman, C.P. (2008). Effects of music on memory for text. *Perceptual and Motor Skills, 106*(3), 927-957.
- Rashidi, N., & Faham, F. (2011). The effect of classical music on the reading comprehension of Iranian students. *Theory and Practice in Language Studies, 1*(1), 74-82.
- Register, D., Darrow, A.A., Standley, J., & Swedberg, O. (2007). The use of music to enhance the reading skills of second grade students and students with reading disabilities. *Journal of Music Therapy, 44*(1), 23-37.
- Shagoury, R. & Power, B.M. (2012). *Living the questions: A guide for teacher researchers* (2nd ed.). Portland, Maine: Stenhouse.
- Stalinski, S.M., & Schellenberg, E.G. (2013). Listeners remember music they like. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 39*(3), 700-716.
- Sze, S., & Yu, S. (2004). Educational benefits of music in an inclusive classroom. Retrieved from <http://files.eric.ed.gov/fulltext/ED490348.pdf>.
- Tze, P., & Chou, M. (2010). Attention drainage effect: How background music effects concentration in Taiwanese college students. *Journal of the Scholarship of Teaching and Learning, 10*(1), 36-46.

Appendix A

RUNNING RECORD SHEET

Name: _____ Date: _____ D. of B.: _____ Age: _____ yrs _____ mths

School: _____ Recorder: _____

Text Titles	Errors Running Words	Error Ratio	Accuracy Rate	Self-correction Ratio
Easy _____	_____	1: _____	_____ %	1: _____
Instructional _____	_____	1: _____	_____ %	1: _____
Hard _____	_____	1: _____	_____ %	1: _____

Directional movement _____

Analysis of Errors and Self-corrections
 Information used or neglected [Meaning (M), Structure or Syntax (S), Visual (V)]

Easy _____

Instructional _____

Hard _____

Cross-checking on information (Note that this behaviour changes over time)

Page	Title	Count		Analysis of Errors and Self-corrections	
		E	SC	E MSV	SC MSV

Page	Title	Count		Analysis of Errors and Self-corrections	
		E	SC	Information used	
				E MSV	SC MSV

Appendix B**Retelling Assessment**

Child's Name: _____

Name of Story: _____

Date: _____

How the Story was Read: ____ Orally ____ Silently ____ Read to Student

P= Prompted Response UP= Unprompted Response

1. Names of main characters (2 points for UP and 1 point for P):
2. Names other important characters (2 points for UP and 1 point for P):
3. Names setting (2 points for UP and 1 point for P):
4. Includes important events from the story (2 points for UP and 1 point for P):
5. Problem is stated (2 points for UP and 1 point for P):
6. Resolution is stated:
7. Story is told in sequential order (2 points for UP and 1 point for P):
8. States story's theme or moral (2 points for UP and 1 point for P):

Total Possible Points: ____/16

Teacher Comments:

Appendix C

Student Interview

1. Do you think music helped your reading? Please explain.
2. Do you think music helped you remember what you read? Please explain.
3. What do you think about playing music when you read?
4. How do you feel about instrumental music playing when you read?
5. Was there anything that bothered you about having music play when you read? If so, what bothered you?