The Effects of Readers' Theatre-Based and Tradition-Based Instruction on Sixth-Grade Students' Comprehension at a Selected Middle School

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Abstract

The purpose of this study was to investigate the effects of readers’ theatre-based and tradition-based instruction on sixth-grade students’ comprehension at a selected middle school. A sample of 10 students from sixth grade was randomly selected for each the experimental and control groups. The experimental group was taught using readers’ theatre-based instruction, while the control group was taught using traditional-based instruction. Data were analyzed using independent T-tests at a 0.05 level of significance. The results indicated significantly higher comprehension scores for the students in the experimental group, t(18) = -1.897, P = 0.037, ES = 0.848. The results suggest that the use of readers’ theatre-based instruction increases the comprehension scores of students.
Introduction

For students to become successful learners in most American schools today, they must be effective readers. Though statistics show that reading is on the rise, over half of the adults in the United States still do not read on a regular basis (National Endowment for the Arts, 2009). One goal educators must seek to meet is to improve the reading comprehension of their students, and one of the most effective ways of doing this is to use methods which improve reading fluency. As Keehn, Harmon, and Shoho (2008) point out “students who engage in laborious, choppy reading have difficulty understanding what they read. For the nonfluent reader, poor word recognition slows down the reading process and takes up valuable cognitive resources necessary for meaning-making” (p. 337).

Many studies point to the fact that readers’ theatre is an effective way of improving students’ reading fluency (Hoyt, 1992; Martinez, Roser, & Strecker, 1998; Flynn, 2005; Corcoran & Davis, 2005; Flynn, 2007; Keehn, Harmon, & Shoho, 2008; Kabilan & Kamaruddin, 2010). One of the greatest aids to such fluency development is the rehearsal of the readers’ theatre text. Each day students are given time in class to rehearse their scripts and prepare for their performance. By reading and rereading the texts they increase their chances of becoming fluent readers (Martinez, Roser, & Strecker, 1998). Keehn, Harmon, and Shoho (2008) also state that readers’ theatre can aid fluency development, because the teacher provides the modeling of proper expressiveness needed for such development.

Due to their influence on fluency development, readers’ theatre and other forms of drama should be methods considered by all teachers. Readers’ theatre is one such
method which can be incorporated into the classroom relatively easily and cheaply. It does not require props, costumes, or sets like other forms of theatre production. The actors also remain in the same place throughout the performance so there is not a need to plan the movement of the actors on the stage. All rehearsal time is dedicated to making sure that the script is read with the proper expression, intonation, and at the proper rate so the story is told effectively.

The study conducted by Keehn, Harmon, and Shoho (2008) sought to find if readers' theatre had a statistically significant effect on the reading level, fluency, comprehension, and vocabulary of eighth-grade students. One class of students was taught using readers’ theatre methods while another class, used as a control group, was taught using more traditional methods. Both classes were taught the same six short stories and given pre-tests and post-tests in all of the areas examined.

The readers’ theatre group was taught using script adaptations of the short stories. They were pretested for vocabulary, given a writing assignment based on the story, introduced to the script with modeling from the teacher on how to read expressively, and given the definition of key vocabulary words on Monday of each week. They read their scripts in small groups to rehearse while the teacher offered modeling and feedback on Tuesday through Thursday of each week. Finally they were post-tested for vocabulary and presented their readings in front of an audience on Friday of each week. The results of the study showed a statistically significant increase in student reading ability, fluency, and vocabulary. In the area of comprehension, the mean gain score for the readers' theatre students was almost double the gain score achieved by the control group, but this difference was not deemed statistically
significant. The researchers also saw an increase in the students’ motivation to read and interest in the reading material presented in class (Keehn, Harmon, & Shoho, 2008).

Review of Related Literature

Reading is a vital skill for success in our society today, and those who are capable of reading and comprehending more difficult text often have more prestigious careers. In order, therefore, for students to have the opportunity to have such careers they must be taught to read and comprehend a variety of texts. Unfortunately, it is often the case that teachers of subjects other than language arts rarely take the time to teach students how to comprehend such texts. This study attempted to show the value of using strategies to increase reading comprehension and fluency in the non-language arts classroom.

Reading Comprehension and Reading Fluency

Reading comprehension.

As previously discussed, reading comprehension skills are vital for students in America’s schools. Reading comprehension is the ability to find meaning within the words one is reading, and is the underlying purpose of reading. This skill is vital for students in all subject areas, not only language arts. In fact, many of the text books used in other subject areas are more difficult for students to read than the narrative texts used in most language arts classrooms, because reading these books requires additional reading skills (DeVries, 2008a). Comprehension is also the primary skill
students are assessed on in non-language arts classrooms, and gaps in comprehension can lead to problems later.

**Reading fluency and its components.**

There is a multidirectional relationship between reading comprehension and reading fluency. This means that as students become more fluent readers they will also be able to comprehend what they are reading more accurately. Strong reading fluency makes reading easier and, in turn, more enjoyable. Such enjoyment encourages students to read more, and reading more, as is the case when practicing any skill, helps students to become more fluent (DeVries, 2008b). In a culture where only a little over half of the adults read on a regular basis, encouraging students to read is a difficult task (NEA, 2009). Teachers must, therefore, ensure reading becomes an enjoyable activity by aiding student development of reading fluency.

The reason for such a connection between comprehension and fluency is a direct result of the components of fluency. Fluency is the ability to rapidly and accurately read text while using proper phrasing and expression in order to understand or convey the author’s intended meaning. Its components include rate, automaticity, prosody, and expression. As a student’s skill in each component increases so will his or her overall reading fluency and comprehension.

**Rate and Automaticity.**

A slow reading rate is often frustrating for students because it takes them longer to read a passage than it does their peers. Students with a slow reading rate will often sacrifice their ability to comprehend what they are reading in order to finish it more quickly. (DeVries, 2008b). DeVries urges teacher to “help struggling readers understand
that proficient readers slow down when the passage is difficult to comprehend and speed up when the text is easy to comprehend" (2008b, p. 256).

The most influential aspect of fluency on the reading rate of students is automaticity. Automaticity encompasses both the quick and accurate recognition of words, and the rapid interpretation of the influence of punctuation. When students have this ability to effortlessly identify the words they are reading, they can devote more of their mental energies to the process of comprehending the text. Some of the sub-skills associated with this skill include the ability to recognize common (or "sight") words, associating letters with their sounds, recognizing syllables within words, and recognizing the meaning (or multiple meanings) of words (DeVries, 2008b).

Prosody and Expression.

The ability to see words as grouped into phrases and to read them as such is called prosody. Students who read words one-by-one lack this ability and in turn do not read fluently. Expression is the ability to read words with the proper inflection, emphasis, and tone, in order to make written words sound like speech. Teachers rarely focus on these abilities of fluency. They believe that reading words quickly is fluency, but prosody and expression are needed in order to understand an author’s intended meaning. Teachers can help these aspects of fluency by modeling fluent reading and having students read texts which group text into natural, speech-like segments (DeVries, 2008b).

Connection between comprehension and fluency.

As one could conclude from the information above, comprehension will usually increase as one becomes more fluent, because less mental energy is devoted to
determining the meaning of individual words. It is also often true, “that as the reader is able to comprehend more material, her fluency increases, because the brain does not need to slow down to process the print” (DeVries, 2008b, p. 254). The perceived connection of these two skills is what DeVries terms the “Reciprocal Theory.” This connection was also a piece of the basis of this study, which used a method shown to aid in the development of fluency (i.e. readers’ theatre) to improve comprehension.

**Theatre in the Language Arts Classroom**

A number of studies have shown that “drama is not just a frill, something to be squeezed into the time left over after important instruction is done; it can engender vital and comprehensive learning experiences for students” (Kornfeld & Leyden, 2005, p. 237). In a world of budget cuts and pushes to teach skills mastery, drama is often seen as something that can only be offered to a select few who need enrichment. In reality, theatre experiences offer a unique opportunity for all students to become fully invested in their learning, and for teachers to help the diverse community of their classrooms gain literacy skills. It is one of the last things that should fall by the wayside in America’s schools. In this study’s examination of this instructional tool shall begin in the language arts classroom and explore ways which several teachers and researchers have taught with theatre.

**Watching Theatre.**

Several genres of literature, such as drama and poetry, were never meant to be read silently to oneself. They were written to be heard, and in the case of drama, seen by their intended audience. Though examining the written text has value in the process
of analyzing literature, teachers do their students a disservice by never allowing them to hear and see the dramatic works they are studying.

Susan Spangler, a former high school teacher, reports having watched many students struggle to read Shakespeare. They are unable to appreciate the rich language and relevant themes of Shakespeare’s works, because they are too busy trying to simply understand his words. She suggests that teachers allow stage productions (both videos and live productions) of Shakespeare to become the “primary text” in their classrooms. Though the text should be available and referenced often, the performance of the play displays the material in its most true form. By presenting drama this way and teaching students “that meaning in a play occurs at the intersection of text and performance” teachers will help students to decipher and examine the deeper meaning of the text (Spangler, 2009, p. 132).

Watching dramatic interpretations of short stories and novels has also been shown to improve student comprehension of the stories and increase student engagement. When students watch an interpretation of the stories they are reading they can see these works “fleshed out” before them and this type of interpretation allows students to see literature through a medium other than print (Harris & Trousdale, 1993). Through this medium students with various learning preferences are drawn into the stories they are reading. Even for students who normally have little interest in reading, seeing a book visually portrayed can give them the motivation they need to engage in a text. This can be the opportunity they need to learn how to loose themselves in a book and can lead them to reflect on what they are reading and expand their imagination (Brinda, 2008).
It is a shame that teachers so often overlook the wealth of potential found in such performances, and instead chose to use methods like what Spangler calls “the traditional read-the-play-listen-to-the-tape-take-a-quiz pedagogy” (2009, p. 131). They simply make students read the text silently, perhaps listen to someone else read the text, and then take a quiz on the text without offering any opportunity to truly engage with the text. Oftentimes these quizzes also add to the problem by simply whittling down great literature into a list of facts which the students either know or not. A true test of reading comprehension, on the other hand, would be a quiz which asked for student reaction to the text by asking thought provoking questions (Spangler, 2009).

Such questions were asked by Wayne Brinda during a study he performed with two classes of sixth-grade reluctant readers. During this study Brinda was acting as the artistic director of a local theatre adaptation of Madeleine L’Engle’s *A Wrinkle in Time*. He worked with two teachers to implement different theatre-based strategies of studying this book and then had the students attend one of the performances of the adaptation. The methods he used can be broken into two strategies which both employ higher level thinking questions which require students to engage in and comprehend what they are reading (Brinda, 2008).

The first strategy Brinda implemented with the students was to place them into small groups called production teams. These teams had to work together to decide how they could do the story of Madeleine L’Engle’s *A Wrinkle in Time* justice on the stage. In order to do this, each student chose a role within their group and acted in this role while reading the book. During this process they drew sketches, wrote in production books, and even brainstormed with professionals in the same role within a theatre.
company. The second strategy Brinda implemented was to have the students brainstorm moments in the text which they considered “wow moments” and/or moments that confused them (Brinda, 2008).

As the day of the play approached, Brinda worked with both classes to prepare them to see the play by going over etiquette and asking them to discuss their expectations. Then on the day of the show he gave them a tour of the theatre before the play began so they could see the set-up process. Finally, he had the students reflect as a group about what they saw and whether or not it lined up with their expectations. From this study Brinda found that theatre experiences including, but not limited to, watching a live performance of what they are reading helps students truly engage with the text. As a result of this study 14 of the 16 students involved in the study passed the unit test, and 10 of them significantly improved their overall reading grade. (Brinda, 2008).

Producing Theatre.

Another important use of theatre in the classroom is the production of theatre by the students in various forms in the classroom. From simple drama techniques to full-scale productions, the production of theatre encompasses even more learning preferences than watching theatre, and students can be evaluated in ways seldom available to many learners in the traditional classroom. Harris and Trousdale (1993) discuss how “insights into human cognitive activity suggest that limiting response to literature to the linguistic channels alone may be the reason some students are not becoming engaged in literature as they might be” (p. 196). By giving students the
opportunity to express themselves, physically engage in the content, and show their mastery of certain skills, theatre opens up a world of possibility few other teaching methods offer.

One of the most striking examples of this is found in the documentary entitled “The Hobart Shakespeareans” which was directed and produced by Mel Stuart and appeared on PBS’s Point of View in 2005. This documentary chronicles the practices of an educator who uses theatre as not simply a supplement to learning, but as an instructional technique.

Many educators would assume that ten-year-olds are not capable of understanding Shakespeare, let alone performing it. Fortunately for the fifth-graders of Hobart Elementary in Los Angeles, CA, Rafe Esquith is not one of these educators. His group of fifty fifth graders, nationally known as “The Hobart Shakespeareans,” works each year to produce their own versions of Shakespeare’s plays. Rafe works with his students to engage in the text of the plays they will perform instead of simply reading it. He helps them build the vocabulary they need to understand the text, discusses the major themes of the play, and connects those major themes to the students’ lives.

Rafe believes that “reading is supposed to be a thrilling adventure” (Stuart, 2005), and his role as a teacher is to bring students along for the ride. He also encourages them to become invested in their learning by taking their questions seriously and pushing them to be extraordinary people. Throughout the year Rafe’s students gain reading skills, learn ample new vocabulary and become more disciplined, respectful people. Though many of his students come into his class not understanding a
word of Shakespeare, they leave with a wealth of knowledge that helps many of them go on to top notch universities such as Yale and Princeton (Stuart, 2005).

Many other teachers, rightfully, think that incorporating full-scale productions in the classroom is too expensive and time-consuming to meet their needs. While full-scale productions are valuable learning experiences for students, teachers can, and should, incorporate theatre experiences in easier ways. Donna Sayers Adomat (2009) describes many activities which allow students to engage with literature by interacting as the characters in the text, and do not involve any special materials or an excessive amount of time. She works with several elementary aged, struggling readers who are simply reading words, but feel no connection to the texts they are reading. They see books as something they have to “get through” as a part of school, but fail to see what significance reading could have on their lives. Her techniques include having students act out the story they have read. Through these methods, the students expanded their repertoire of comprehension strategies, and in turn grew into more proficient readers (Adomat, 2009).

**Readers’ Theatre**

Another relatively simple way to incorporate drama is through readers’ theatre which has been defined as a form of drama in which the actors stand or sit on stools with their scripts in hand as they read their part. No sets, costumes, or props are required to engineer a successful production, but they can be used. The actors rarely, if ever, move from their original place, so formal blocking (or stage movement) is not an issue. The action of the drama is based solely on the voice and facial expressions of the
actor instead of their movement. In this form of theatre the performance must use their reading rate, intonation, and "emphasis on the meaning-bearing cadences of language" to tell the story of the script (Hoyt, 1992, p. 582).

**Effects on comprehension and fluency.**

The skill of comprehension can be addressed through the development of scripts for readers' theatre and other theatre productions. There are many prepared readers' theatre scripts available, as well as dramatic adaptations of other literature for children, but, after students have been introduced to readers' theatre through a prepared script, teachers can have them begin writing their own scripts (Hoyt, 1992). Using a picture book, short story, novel, or other source as a template, students can create their own scripts to represent all or part of the text. For Georgia Leyden's students, who were working with stories of historical events, this process required them to reference other texts in order to make their scripts more accurate. She states that “consulting several different texts not only facilitated their work on the plays but also helped students to learn that the plays were part of a broader historical context” (Kornfeld & Leyden, 2005, p. 233). Rewriting these scripts also require students to fully comprehend the text they are reading in order to portray the meaning of the text to their audience.

Through the practice of making the script “come alive” in this way, students are also able to develop or improve their oral reading fluency. One of the greatest aids to such fluency development is the rehearsal of the readers' theatre text. Each day students are given time in class to rehearse their scripts and prepare for their performance. By reading and rereading the texts they increase their chances of becoming fluent readers (Martinez, Roser, & Strecker, 1998). This is especially
important given the close relationship between fluency and comprehension discussed earlier. As the students’ fluency is improved by the rereading, so is their comprehension of the text they are reading and rehearsing.

**Readers’ theatre effect on fluency.**

It is the connection between fluency and comprehension that drives the study conducted by Corcoran and Davis (2005) who seek to use readers’ theatre to help twelve second and third grade students with special needs improve their fluency. They begin by establishing the importance of developing reading fluency during third grade in order to become effective readers as adults. They also point out the fact that, despite the importance of this development, most reading education programs do not put much emphasis on fluency instruction. Next, they establish readers’ theatre as one effective strategy for helping students to develop fluency, because it incorporates many other effective strategies such as modeling, repeated readings, and independent practice, which have been mentioned earlier. They also pointed out that readers’ theatre also motivates students to become more interested in becoming fluent readers (Corcoran & Davis, 2005).

For this study the researcher and the special education teacher worked together to help these students make gains in all aspects of reading. The researcher worked with them specifically on oral reading fluency by leading them through a readers’ theatre experience. Of the twelve students in this study, three were considered emotionally handicapped, one was diagnosed as having Asperger’s Syndrome, and eight had a learning disability. The participants all attended a public school in Central Florida, and were in a self-contained classroom for students with learning disabilities and emotional
handicaps. For the readers’ theatre the class was divided into three groups based on reading level. Each group performed three plays for a pre-kindergarten audience during the eight weeks, and each student was given at least one major role (Corcoran & Davis, 2005).

Before and after the readers’ theatre experience the students were given a reading attitude survey. The results of this survey show that the students’ attitudes toward reading became more positive as a result of the experience. Their oral reading fluencies were also assessed using a running record and all of the students showed growth in the number of words they could read fluently, though not all of the growth was significant (Corcoran & Davis, 2005). Though this assessment looked at only one part of the students’ fluencies (i.e. automaticity), the results are still encouraging and point to the possibility that all areas of fluency can be positively affected by this strategy.

One study that looked beyond the effect readers’ theatre can have on automaticity was conducted by Clark, Morrison, and Wilcox (2009). For this study they define fluency as a vital, yet often overlooked part of reading instruction which consists of both rate and prosody. This study seeks to examine the developmental process of fluency in three fourth-grade boys from a middle-class suburban school district in the Inner-mountain West where 90% of students speak English as their primary language at home. The data discovered in this study are presented as a multi-case study. The three boys are a part of a class that is being taught using readers’ theatre and volunteered to be a part of the study. The first boy, Andy scored low in both areas of fluency (i.e. rate and prosody), the second boy, Daniel, scored high in rate, but low in prosody, and the
third boy, Jacob, scored high in prosody but low in rate (Clark, Morrison, and Wilcox, 2009).

The study conducted took place over the course of eight weeks and used pre-made scripts. The scripts were heterogeneous so that students of varying reading levels could be placed in the same groups. The participants were scored for rate and prosody, and filled out a written report once a week. They were also interviewed at the beginning, in the middle, and at the end of the study by one of the researchers. The results for each of the boys are presented individually, and then general recommendations for future study and classroom application are added (Clark, Morrison, & Wilcox, 2009).

Andy’s results show that over the course of the study his prosodic elements of fluency improved. It was also observed that his classroom involvement and behavior affected his fluency, and that his confidence seemed to increase. Daniel’s expression and volume also increased, as did his pace throughout the study. At the same time his classroom engagement and participation, and his confidence and motivation as a reader increased. Jacob’s pace and volume improved during the study. He also took on a leadership role within the classroom.

The results of this study support the hypothesis that the prosodic elements of reading directly influence a reader’s ability to comprehend text. Though pace is important, the skill of prosody is vital to truly fluent reading. This study also shows that readers’ theatre is an effective tool to use to motivate students to reads. It gives their reading a clearly defined purpose and a chance to succeed as readers in front of an audience.
Readers’ theatre’s effect on comprehension.

The study mentioned in the introduction to this thesis by Keehn, Harmon, and Shoho (2008), did not find a statistically significant link between readers’ theatre and comprehension. The participants of this study were two classes of eighth grade students from a large metropolitan area in South Texas. The middle school they attended was a Title I school and their classrooms were 60% Hispanic and 33% African American. Over half of the students in each class were below reading level at the beginning of the study, and the two classes were determined to be statistically equal in this area. Though the students in this study did increase in reading comprehension, this increase was not statistically significant (Keehn, Harmon, & Shoho, 2008).

A second study which investigated the influence readers’ theatre could have on comprehension was conducted by Kabilan and Kamaruddin (2010). This study was conducted at a premier school in Malaysia for a class of twenty students who were learning English as a foreign language and studying English literature. The students in this study were all around the age of fourteen, and most stated that the English readings they were reading were difficult for them to understand. The authors began by pointing out that this difficulty is a common one in Malaysian schools, and asserts that a project directed at engaging learners’ creatively could help to overcome this difficulty (Kabilan & Kamarrudin, 2010).

Kabilan and Kamaruddin (2010) then went on to describe how the method of instruction with readers’ theatre was a method which has worked in other settings to
solve similar problems. This study took place during the spring semester and consisted of two distinct stages. In the first stage the learners read the novel *Potato People* by Angela Wright and were instructed using the methods normally used in that class. The second stage of this study was the experimental stage which was further divided into four phases. In the first phase the students were divided into groups and each group was given two chapters of the book to read and develop into a script. In the second phase the students worked on the actual rehearsal of their scripts and in the third phase they performed their scripts for the other classes of their age. Finally, in the fourth phase the students spent time reflecting on their performance and that of their peers (Kabilan & Kamaruddin, 2010).

The students were evaluated using three methods: a questionnaire, an interview, and teacher observation. The questionnaire was given after the students read the novel the first time and after their readers’ theatre presentation. The interview took place with six students chosen from the class after each questionnaire. The teacher observation took place throughout the study. From all of these sources it was concluded that the readers’ theatre experience positively affected the interest, motivation, and perceived comprehension levels of the literary text for these Malaysian learners. Though this study showed an increase in comprehension, it is unfortunate that this data were not collected in a quantitative method (Kabilan & Kamaruddin, 2010).

**Readers’ theatre outside of language arts**

Up until this point all of the studies mentioned have taken place in a language arts classroom. The readers’ theatre productions in these classrooms were based on stories from literature of some form or another. Such scripts can also be created,
however, from narrative resources which relate to the curriculum found in other classrooms. In a study by Susan Brooks and Cheryl Kopec Nahmias (2009), they used the book *Search for the Golden Moon Bear: Science and Adventure in the Asian Tropics* by Sy Montgomery. The students in Brooks’s seventh-grade science class used this book as a guide for writing their own readers’ theatre script of the book. This book incorporates both science standards on genetics and social studies standards on Southeast Asian geography (Brooks & Nahmias, 2009).

For the purpose of this study Brooks and Nahmias (2009) looked at the level of student engagement throughout the process, the quality of the scripts made, and the results of several assessments. They determined from their observation and student response that the students were actively engaged throughout the process of writing and performing the script for their peers. They also determined that students comprehended the key ideas and events of the book, based on their scripts and their results on vocabulary assessments (Brooks & Nahmias, 2009).

Narrative text such as this is not, however, the only type of text that students will need to know how to read in order to succeed in school. They must also read and understand the informational texts given to them in subjects such as science, math, and social studies. Readers’ theatre scripts can also be developed with informational texts as their template. Such a method is seen implemented in the works of Rosalind Flynn (2004 & 2007).

Students or teachers can prepare what Rosalind Flynn calls Curriculum-Based Readers’ Theatre which emphasizes passing along information while entertaining the audience. Using almost any topic students or teachers can create scripts which explain
the topic they are studying. Students begin with the classroom curriculum content and use resources such as their textbooks to develop the script. They must read this material in a critical way in order to locate the specific information which needs to be found in their scripts. The writing of their scripts offers them a creative outlet for expressing the information they have learned from the text. Students then perform the scripts and incorporate meaningful gestures which help them make their performance more effective and increases their retention of the material. In preparation for their performance student also read the information multiple times which also increases retention. Since it can be created using any curriculum standards, this form of readers’ theatre is a dynamic way of incorporating literacy skills and fine arts into science, math, and social studies classrooms (Flynn, 2004 & 2007).

**Conclusion**

For the purposes of this study, a curriculum-based readers’ theatre script was developed by students following Flynn’s model. Through creating such a script students read and analyzed the informational text provided, wrote a creative piece showcasing the ideas of this text, and added gestures to their performance to enhance the meaning of these ideas. Through the process of reading and rereading this text to prepare for their performance they had the opportunity to improve their reading fluency. It was hoped that by increasing their fluency with this information text through this process, the students’ comprehension scores would also increase.
Methodology and Procedures

The purpose of this study was to investigate the effects of readers’ theatre-based and tradition-based instruction on sixth-grade students’ comprehension at a selected middle school. The study was also conducted to determine if the effects of readers’ theatre-based instruction on comprehension would differ between male and female students in the sixth-grade at a selected middle school. Data collection procedures are discussed here below.

The population for this study was a Title I, three year middle school in a mid-size city in Northeast Tennessee. Of the 774 students in this school, 634 were white, 90 were black, 38 were Hispanic, 10 were Asian, and 2 were American Indian. The school contained 375 males and 399 females. 60% of these students were considered to be economically disadvantaged.

The sample used for this study consisted of twenty students who were randomly selected from seventy-nine sixth grade students from one of three six grade teams at the selected middle school. Ten of the students were male and ten were female. Five males and five females were randomly assigned to both experimental and control groups.

Data were collected using two teacher-created multiple choice tests of the material covered in each section of the unit on electricity. The tests were created using the test generator program provided by Houghton Mifflin Harcourt to accompany their
Tennessee Grade 6 Holt Science & Technology textbook. The tests were enhanced by adding questions from the Kingsport City Schools Sixth-Grade Science Benchmark Test. These tests were considered reliable because they were consistent in the structure of their questions and the information they desired of the students. These tests were considered valid because their questions covered the material addressed in their respective sections of the unit on electricity. Both of these tests lined up with Tennessee’s sixth-grade science curriculum standards.

**Procedures**

Before conducting the study, permission was granted from the mentor teacher, principal of the school, the school system’s director of accountability, and Milligan College’s institutional review board. Once permission was attained a letter was sent to the student’s parents informing them of the study and letting them know that their child could withdraw from the study at any time without penalty. The study commenced immediately after all permission was granted from all parties involved.

For the first five days of the study, the control group was taught science content about electricity using traditional methods, including note-taking from lecture with PowerPoint slides, making foldable notes, making cut-and-paste diagrams, and doing hands-on experiments. On day six, the students were tested using a multiple-choice test over the content covered the previous week. The results of this test were recorded for data analysis.

For days seven through twelve, the experimental group was taught using readers theatre based instruction. The group worked together to write and produce a readers’ theatre script based on their science curriculum on electricity. The schedule of this week
was a modified form of the instructional outline suggested by Rosalind M. Flynn in her book *Dramatizing the Content with Curriculum-Based Readers Theatre, Grades 6-12* (2007, p. 20). Throughout this process the teacher acted as a guide for student research and a facilitator of the large group interactions of the students. The teacher also taught and modeled the gestures and expressional speaking used during readers' theatre. After the completion of teaching using readers theatre based instruction, the group was administered a test and results recorded for data analysis.

**Results**

Two research questions were used to guide the analysis of data.

Research question #1:  
Is there a difference between student comprehension scores when taught using readers’ theatre-based instruction and when taught using tradition-based instruction?

Research question #2:  
Is there a difference between student comprehension scores when they are taught using readers’ theatre-based instruction and when they are taught using tradition-based instruction?

Each research question was followed by a research hypothesis and a null hypothesis. Research question 1 and 2 were analyzed using Independent samples t-test procedures. The results for research question 1 yielded significant results $t(18) = 1.897$, $p=0.37$, $ES = 0.848$. Therefore the null hypothesis was rejected. The results are displayed in table 1. There was no significant difference found for research question 2.
Table 1

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*Note. p<0.05*

Discussion

Two research questions were addressed in this study.

The first research question sought to find if there was a difference between student comprehension scores when they were taught using readers’ theatre-based instruction and when they were taught using tradition-based instruction at a selected middle school. In response to this question an independent T-test was conducted and the results indicated significant difference between the experimental and control group. The students who were taught using readers’ theatre-based teaching scored significantly higher than the students taught using the traditional based instruction.

The results suggest that readers’ theatre can be more effective than traditional teaching methods. This is consistent with the studies conducted by Keehn, Harmon, and Shoho (2008) and Kabilan and Kamaruddin (2010) mentioned in the literature review which found that readers’ theatre has a positive impact on comprehension. The results for this study also showed that readers’ theatre can be used effectively in an
academic subject other than language arts. This is consistent with the works of Rosalind M. Flynn (2004 & 2007) mentioned in the literature review which stressed that fact that students or teachers can use almost any topic to create scripts which explain the topic they are studying. A modified form of her method, curriculum-based readers’ theatre, was used to help students create and perform an original readers’ theatre script.

The second research question sought to find if there was a difference between male and female students’ comprehension scores when they were taught using readers’ theatre-based instruction at a selected middle school. In response to this question an independent T-test was run and resulted in no significant difference in the comprehension scores of male and female students. Some of the studies mentioned in the literature review, such as the one conducted by Clark, Morrison, and Wilcox (2009), focused primarily on male students. This result shows that female students’ comprehension can benefit equally from the use of readers’ theatre in the classroom.

Conclusions

The purpose of this study was to investigate the effects of readers’ theatre-based and tradition-based Instruction on sixth-grade students’ comprehension at a selected middle school. The study was also conducted to determine if the effects of readers’ theatre-based instruction on comprehension would differ between male and female students in the sixth-grade at a selected middle school. Two independent T-tests were conducted. The results indicated that students taught using readers’ theatre-based
teaching scored significantly higher than students taught using traditional-based instruction. The results also showed that there was not a significant difference between the scores of males and females taught using readers’ theatre-based instruction.
References


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