

The Effect of Group Size on Reading Fluency

By Lauren Taylor

Submitted in Partial Fulfillment of the Requirements for the
Degree of Master of Education

May 2014

Graduate Programs in Education

Goucher College

Table of Contents

List of Tables	i
Abstract	ii
I. Introduction	1
Statement of Problem	2
Hypothesis (Null)	2
Operational Definitions	3
II. Review of the Literature	4
Introduction	4
The Five Components of Reading	4
Consequences of Low Reading Skills	6
Reading Fluency	7
Reading Fluency Strategies	8
III. Methods	12
Participants	12
Instrument	14
Procedure	15
IV. Results	16
Table 1	16
V. Discussion	17
Implications of the Study	17
Theoretical Consequences	19

Suggestions for Future Research	20
References	21

List of Tables

1. Pretest and Posttest Reading Scores for Three-Student and Six-Student Reading Groups	16
---	----

Abstract

The purpose of this study was to determine whether a smaller reading group size would improve the reading fluency of first grade students. The participants of this study were enrolled in an Anne Arundel County Public School for the 2013–2014 school year. The small group consisted of three on-level students, and the other, larger group contained six on-level students. The same amount of reading fluency instruction was given to both groups five days a week over an eight-week period. The instruction took place for approximately 20 minutes each day. During instruction, students in both groups read their Treasures guided reader book for the week and worked on a variety of reading fluency strategies. At the end of the eight weeks, the measurement tool the teacher used to posttest the nine students was the Fountas and Pinnell (2011) Benchmark Assessment System. The hypothesis was supported in this study since there was no significant difference in reading achievement between the two groups. Research in the area of group sizes and reading fluency should continue to support the best practices needed for first grade students.

CHAPTER I

INTRODUCTION

Reading is one of the most important skills that students learn in the primary grades. Students spend the majority of their school day learning different skills and techniques to become better readers. Reading instruction consists of five major components: phonics, phonemic awareness, vocabulary, fluency, and reading comprehension. These five components can be used together or separately when teaching reading. According to Tindall and Nisbet (2010), “The five essential components of reading are interrelated and work in concert to extract the essence of reading, which is gaining meaning from text” (p. 2).

There are many consequences of poor reading skills within the classroom. Struggling readers face challenges in reading and various other school subjects. Poor grades and behavioral issues are just two challenges that struggling readers face. Language arts skills are needed in all subject areas in school, and when a student is lacking these skills, he or she falls behind quickly. By the end of first grade, low reading skills result in a broad spectrum of difficulties (Morgan, Farkas, Tufis, & Sperling, 2008). Many struggling readers fall behind their peers not only in reading, but in other core subject areas too, such as math, social studies, and science. Falling behind academically also can cause confidence and behavioral issues in young students.

Due to an increase in the number struggling readers, interventions are now being used across the country to improve reading skills. Reading fluency is one reading component that first graders often struggle with. Reading fluency is defined as “the ability to read rapidly, smoothly, without many errors, and with appropriate expression” (Graves, Graves, & Juel, 2007, p. 172).

Some common reading fluency strategies are repeated reading, Reader’s Theater, wide reading, and modeling good fluency. Repeated reading is a method used in both small and whole

groups wherein the teacher reads a passage while the students listen and follow along and then the students repeat the same passage that the teacher has read. This occurs over and over again so that students can become fluent with the particular passage. Reader's Theater is a form of a play where actors (students) do not memorize their lines while performing. Instead, readers practice good reading skills to work on fluency components such as vocal expression, tone, accuracy, and speed. Wide reading is simply exposing students to a variety of texts. These strategies are commonly used in primary classrooms in order to help struggling readers with fluency.

In addition to the strategies previously mentioned, class and/or group size is another factor that is important to address when it comes to providing intensive reading instruction. Surprisingly, little research has been done on group size and its effects on student achievement; however, individualized instruction has been shown to remediate severe reading deficits of many students (Torgesen, Wagner, Rashotte, & Herron, 1999). It can be much easier for educators to employ reading fluency intervention strategies in small groups than it would be to use them with the whole class.

Statement of the Problem

Do smaller reading groups increase reading fluency in first grade students?

Hypothesis (Null)

The size of the group for reading instruction will not influence the fluency scores of first grade students.

Operational Definitions

- Size of groups-There are two groups being used for this experiment. The small group consists of three students, and the larger group contains six students. Prior to the experiment, all nine students were in the same on-level first grade reading group.

- Reading instruction-Both the small and larger groups will be reading the same stories from the reading program, Treasures. “Treasures is a research based, comprehensive Reading Language Arts program for grades K-6” (Macmillan & McGraw-Hill, 2006, p. 1). Fluency instruction within both groups will consist of the same strategies and activities.
- Fluency scores-Fluency data will be collected using the Fountas & Pinnell Benchmark Assessment System. The recording sheet is most commonly known as the running record. The first running record was given prior to the start of the new group dynamics. At the end of the experiment, students will be retested to determine whether there was an increase in reading fluency.

CHAPTER II

REVIEW OF THE LITERATURE

Introduction

This review of the literature will discuss reading. Section one will focus on the five components of reading. Section two provides an overview on consequences of low reading skills by the end of first grade. Section three will focus on reading fluency. In section four, the focus will be centered on the various reading strategies that are used to improve fluency. Finally, section five discusses the possible reading fluency interventions that are used in first grade classrooms.

The Five Components of Reading

Reading instruction is broken down into five major components. The big five reading components are phonics, phonemic awareness, vocabulary, fluency, and reading comprehension. These components can be used together or separately depending on the reading instruction. According to Tindall and Nisbet (2010), “The five essential components of reading are interrelated and work in concert to extract the essence of reading, which is gaining meaning from text” (p. 2). The first component of reading is phonics. Phonics is taught to very early readers to help them understand the relationship between letters and sounds either in isolation or in the text. The main goal of phonics instruction is to help readers quickly determine the sounds in unfamiliar written words. When readers encounter new words in texts, they use the elements of phonics to decode and understand them. In first grade, phonics instruction is relied on heavily in the beginning of the school year, and continued instruction occurs throughout the year. Once readers grasp the letter-to-sound relationship, they are able to start reading. Phonics instruction is used both in isolation and in text in first grade.

Phonemic awareness is very similar to phonics in that it is taught at the beginning stages of learning how to read. Both phonics and phonemic awareness relate to the understanding that words are comprised of small segments of sound. The difference is that phonemic awareness works with the spoken language. Ultimately, phonemic awareness is the knowledge that words are made up of a grouping of individual sounds. In first grade, phonemic awareness instruction is also taught more in the beginning of the year when readers are just beginning to learn to read. “Phonemic awareness, the most complex phonological skill, is important to the reading process because of its association with improvement in reading and spelling” (Tindall & Nisbet, 2010, p. 2). Instruction can take place in both whole group and small group settings.

The next component of reading is vocabulary. Vocabulary can be defined as knowledge of word meanings. Vocabulary is an important component in that a student’s vocabulary is constantly changing and growing. Researchers attest to the crucial role that vocabulary plays in reading. “Without sufficient vocabulary, it is impossible to successfully read for meaning” (Tindall & Nisbet, 2010, p. 5). First grade reading instruction relies heavily on vocabulary. Each week, students learn around ten new vocabulary words both in isolation and in context. Broadening a child’s vocabulary helps students read better and also helps them comprehend what they are reading.

Fluency is another component of reading. Fluency is taught once students have a better understanding of the phonics and phonemic awareness components of reading. “Fluency is the component of the reading process that allows readers to decode the words in a text with sufficient accuracy and automaticity (efficacy) to allow for understanding the text and that reflect the prosodic features embedded in the text” (The art and science..., 2011, p. 3).

Fluency is considered a process with three stages. The first stage is the emergent literacy stage which occurs before formal reading instruction. Students understand basic reading facts about print as spoken language. They also learn rules of reading such as reading from left to right, reading from top to bottom, and spaces mean new words (Graves et al., 2007). The second stage is all about decoding and recognizing printed words. Unlike stage one, stage two is formal because the student is trying to read the text even though the student is not fluent yet. In this stage, the reader is aware of sounding out words to decode. Finally, in the third stage, students move from decoding words to reading automatically. Once students are in this stage, reading should become smooth and accurate and should include expression (Graves et al., 2007).

The final component of reading is reading comprehension. Reading comprehension is the understanding of a text. Much like fluency, reading comprehension is only able to occur once a student can read. Many students learn how to comprehend by listening to good readers read and then trying to understanding what they have read. In first grade, students practice reading comprehension when a fluent reader reads a text. As the students become more comfortable with comprehension, students are able to read stories and comprehend on their own (Riedel, 2007).

Consequences of Low Reading Skills

There are many factors of reading that determine whether a reader is successful or unsuccessful. If a student is a struggling reader, he or she can face many challenges. Because reading skills are needed not only in reading and language arts but in all school subjects, students who have trouble reading usually perform lower in other academic areas as well. Reading is an essential skill to have in life. By the end of first grade, low reading skills result in a broad spectrum of difficulties (Morgan et al., 2008).

One tangible result of poor reading is low grades. Low grades can ultimately result in low self-esteem and lack of confidence. By the end of first grade, most struggling readers understand that they lack the reading skills of their peers. Unfortunately, low confidence and self-esteem can also be the cause of low reading skills. Students who become trapped in this vicious cycle can do even more poorly academically over time (Morgan et al., 2008).

Another consequence of low reading skills is behavioral issues. In some cases, students who have trouble reading revert to bad behavior. Some students do this in order to gain attention or act out due to high frustration levels. Overall, these behaviors can stunt a students' academic growth in the present and future if not corrected (Morgan et al., 2008).

Reading Fluency

Reading fluency is a very important reading component that can be difficult for struggling readers. "Fluency is the ability to read rapidly, smoothly, without many errors, and with appropriate expression" (Graves et al., 2007, p. 172). Unlike other strategies, fluency is mainly assessed by reading orally. However, there is something known as silent fluency wherein students practice fluency while reading to themselves. This is, of course, harder to assess but teachers should "recognize it because the child reads relatively rapidly, without seeming to struggle, and with good understanding of what (the child) has read" (Graves et al., 2007, p. 172). In first grade, reading fluency is assessed through running records, fluency checks, DIBELS (Dynamic Indicators of Basic Early Literacy Skills), testing, and teacher observations in small group settings (DIBELS.org).

Fluency checks and running records are very similar forms of assessments. However, fluency checks are informal and can be used weekly. On the other hand, running records are more formal and are designed be used for assessment less frequently. Both assessments are cold

reads that are timed with some sort of comprehension check at the end. In first grade, these assessments are given from the beginning until the end of the year.

DIBELS tests are even more formal than running records. This assessment is “designed to be short (one minute) fluency measures used to regularly monitor the development of early literacy and early reading skills” (DIBELS.org, n.p.). In first grade, students are tested on their oral reading fluency from a list of words in the beginning of the year. In the next two assessments, which occur in January and May, students’ oral reading fluency is assessed through reading passages.

Finally, the least formal assessment used to evaluate fluency is through teacher observation. Most of these observations are made during small reading group time. While students either read aloud to themselves or chorally, teachers are able to determine whether a reader is fluent or not fluent. In first grade, daily fluency observations occur in both small group and whole group reading.

Reading Fluency Strategies

There are many reading fluency strategies that educators use in order to teach students how to read fluently. All in all, reading fluency takes a lot of practice. Some common reading fluency strategies are repeated reading, Reader’s Theater, wide reading and modeling good fluency.

Perhaps the best known of the reading interventions designed to support fluency development is repeated reading (Kuhn, Stahl, & Center for the Improvement of Early Reading Achievement, 2000). Repeated reading is a method in which readers read the same text multiple times until goals of speed and accuracy are reached. In a study that tested the students’ fluency using repeated reading vs. non-repeated reading after an 18-session experiment, the students who

got the repeated reading instruction were more fluent (Kuhn, 2005). In the study school, first graders practice repeated reading with their guided readers each and every day. Repeated reading seems to give them confidence. By the end of the week, the students can read the story fluently, making only a few mistakes.

Another fluency strategy involves the use of Reader's Theater. Reader's Theater has readers reading a "script adapted from literature and the audience picturing the action from hearing the script being read aloud" (Cornwell, 2013, p. 1). Students work together to "bring the text alive by using voice, facial expressions, and some gestures" (Cornwell, 2013, p. 1). Marr, Algozzine, Nicholson, and Dugan (2011) found that "peer-mediated instruction in which students work together to support each other is an evidence-based practice for improving performance in a variety of academic areas" (p. 261). Overall, Reader's Theater is a form of repeated reading in that it helps to develop fluency through repeated exposure to the text.

Wide reading is another common strategy used to help a reader become more fluent. This strategy focuses on the amount of text read as opposed to one text being read repeatedly. In 2005, Kuhn found that wide reading and repeated reading have similar results in fluency; however, when students wide read, they are improving their comprehension much more than with repeated reading. Wide reading has also been shown to improve a reader's silent reading rate. In Ari's 2010 study, the wide reading group gained more silent reading words than the repeated reading group. It is suggested that wide reading be used in all classrooms; each day, students should be introduced to a different text.

Modeling fluent reading is an essential strategy for all beginning and struggling readers. In first grade, "teacher read-alouds should be a model of fluency and expression for students" (Buchanan, 2006, p. 6). Even when students are given a passage to read independently, it is

useful for the teacher to read the first page aloud. This sets the tone of the reading and may even introduce some unfamiliar vocabulary (Buchanan, 2006). Students will be able to pick out the characteristics of fluent reading the more they hear fluent reading, so it is important to model by reading smoothly, accurately, and with expression.

Reading Fluency Strategies for First Grade

There are potential interventions that can be used to help non-fluent readers improve their reading fluency in first grade, as well. Most struggling readers receive fluency intervention in small groups within the classroom, guided by the teacher. However, in some cases, struggling readers are pulled out of the classroom for extra intervention by a reading specialist. In those interventions, the students focus on all five components of reading. The following interventions are informal fluency interventions: guided readers, one-on-one support, and fluency word lists.

Guided readers within most reading programs can be significant tools in helping struggling readers. Guided readers are leveled so that every child can read on his or her instructional level. During a week, students have plenty of opportunities to use the repeated reading strategy with their guided reader. The repeated reading along with a variety of other books in the reading program allow for students to improve their fluency.

Teaching in small flexible groups or one-on-one teaching is another intervention for struggling readers. Certain students struggle more in fluency than others therefore, “it seems that it would be beneficial to develop a strategy that combines effective fluency instruction within a flexible grouping format” (Kuhn, 2004, p. 2) as opposed to whole group. Pulling groups of students or individuals that share the same instructional needs is valuable for both the teacher and the students.

Fluency word lists are an important tool for readers who struggle with their fluency. These lists consist of words on students' instructional level that students might see frequently in their books. When students practice the words out of context, it helps them read the words automatically in context. This is essential because "readers who need to spend a significant portion of their time identifying individual words rarely have enough attention left over to focus on text's meaning" (Kuhn, 2004, p. 1). Once fluency word lists are implemented into instruction, students become more confident in reading words automatically while reading, which then leads to better reading fluency and comprehension.

Overall, there are many areas that are affected by reading fluency. "Ensuring that students become fluent readers is one of the major goals of reading instruction" (Kuhn, 2004, p. 1). All in all, it is the combination of reading accuracy, automaticity, and expression that makes oral reading sound fluent.

CHAPTER III

METHODS

The purpose of this study was to determine whether a smaller reading group size would improve the reading fluency of first grade students. The type of design for this action research is experimental.

Participants

The action research took place at an elementary school in Hanover, Maryland. The study school serves students in prekindergarten through fifth grade. The school has been occupied since 1955 and was renovated in 2007. Currently, the study school is an International Baccalaureate candidate school.

The International Baccalaureate aims to develop inquiring, knowledgeable and caring young people who help to create a better and more peaceful world through intercultural understanding and respect. To this end the organization works with schools, governments and international organizations to develop challenging programmes of international education and rigorous assessment. These programmes encourage students across the world to become active, compassionate and lifelong learners who understand that other people, with their differences, can also be right. (ibo.org, 2015-2014).

There are approximately 736 students enrolled in the study school with approximately half male and half female. The majority of students (328) who attend this school are Black/African American, and 166 students are White, 106 are Asian, 73 are two or more races, and 59 are Hispanic or Latino. Special education services are delivered to 33% of the student population. Along with being an IB candidate school, the study school also offers Advanced Learner Programs (ALPs) and Talent Development as enrichment programs. ALPs are available

for students in second grade through fifth grade. The Talent Development program is used by all students in kindergarten through second grade.

In 2013, 79.5% of third graders, 93% of fourth graders, and 87.6% of fifth graders scored advanced or proficient on the Reading Maryland School Assessment (MSA), a test of reading and math achievement that meets the testing requirements of the federal No Child Left Behind Act. The test is administered each year in early March in reading and math in Grades 3 through 8 (MSDE, 2014).

Out of the approximately 736 students enrolled in the study school, first grade students number 124. There are five first grade teachers who have 22–26 students in each class. The class in which the action research is taking place has 24 students. Within the class, there are three reading groups comprised of students whose skills range from below grade level to above grade level. The group that the teacher is using for the action research is the on-level group, also known as the red group. The red group consists of nine students, five male and four female. In order to conduct the action research, the teacher randomly split this group into two separate groups.

The first group consisted of three students, two male and one female. Two group members are African American, and one is White. The groups members' reading running record levels ranged from G–I. These levels fall within the first grade on-level category. By the end of first grade, students should be reading on a level J to be considered on-level readers. Group members' fluency levels ranged from 0–2 on a 0–3 point scale.

The second group consisted of six students, three male and three female. Three members of the group are African American, two are White, and one is Hispanic. The group members' reading running record levels ranged from F–I. Similar to the members of Group One, these

students also fell within first grade on-level reading range. Their fluency levels also ranged from 0–2 on 0–3 point scale.

Instrument

In order to gather reading fluency data, the teacher used Fountas and Pinnell's (2011) Benchmark Assessment System (Shea, 2012). This assessment is administered during a one-on-one, student-teacher assessment conference. Students read aloud and talk about a series of benchmark books while the teacher observes and makes note of reading behaviors. Teachers then use the established scoring conventions and procedures for analysis to gather information about a student's processing strategy, fluency, and comprehension (Fountas & Pinnell, 2011, pps. 2–3).

The analysis of fluency takes place using a four-point scale with a score of a zero given when the student “reads primarily word-by-word with occasional but infrequent or inappropriate phrasing; no smooth or expressive interpretation, irregular pausing, and no attention to author's meaning or punctuation; no stress or inappropriate stress, and slow rate” (Fountas & Pinnell, 2011, p. 13). A score of one is given when a student “reads primarily in two-word phrases with some three- and four-word groups and some word-by-word reading; almost no smooth, expressive interpretation or pausing guided by author's meaning and punctuation; almost no stress or inappropriate stress, with slow rate most of the time” (Fountas & Pinnell, 2011, p. 13). A student receives a score of a two if he or she “reads primarily in three- or four-word phrase groups; some smooth, expressive interpretation and pausing guided by author's meaning and punctuation; mostly appropriate stress and rate with some slowdowns” (Fountas & Pinnell, 2011, p. 13). Lastly, a student receives a score of a three if he or she “reads primarily in larger, meaningful phrases or word groups; mostly smooth, expressive interpretation and pausing guided

by author's meaning and punctuation; appropriate stress and rate with only a few slowdowns” (Fountas & Pinnell, 2011, p. 13).

Procedure

The researcher chose to make the on-level reading group her population. Each of the nine students was pretested using the Fountas and Pinnell's (2011) Benchmark Assessment System. The subgroups within the on-level group were based on a random sample. Three students were randomly selected to become the small group, and the remaining six students automatically comprised the larger group. The researcher randomly selected the students by drawing their names from a hat.

The same amount of reading fluency instruction was given to both groups five days a week over an eight-week period. The instruction took place for approximately 20 minutes each day. During instruction, students in both groups read their Treasures guided reader book for the week and worked on a variety of reading fluency strategies. At the end of the eight weeks, the teacher posttested the nine students using the same Fountas and Pinnell (2011) Benchmark Assessment System.

CHAPTER IV

RESULTS

The purpose of this study was to determine whether smaller reading group size would improve the reading fluency of first grade students. The pre- and posttest reading results for the three and six student reading groups were analyzed using a t test for independent groups. The results are presented in Table 1.

Table 1

Pretest and Posttest Reading Scores for Three-Student and Six-Student Reading Groups

Test	Group	Mean	N	St. Dev.	t	Sig.
Reading Level Pretest	3 Students	97.6	3	1.53	0.13	0.90
	6 Students	96.5	6	1.87		
Reading Level Posttest	3 Students	97.3	3	1.53	0.35	0.74
	6 Students	97.0	6	1.27		
Fluency Level Pretest	3 Students	1.3	3	0.58	0.88	0.41
	6 Students	1.7	6	0.52		
Fluency Level Posttest	3 Students	2.3	3	0.58	1.76	0.12
	6 Students	1.7	6	0.52		

The null hypothesis that the size of the group for reading instruction would not influence the fluency scores of first grade students is retained.

CHAPTER V

DISCUSSION

The hypothesis in this study was supported because the hypothesis predicted that there would be no significant difference between the reading fluency scores in the three-student and six-student groups.

After analyzing the results in Table 1, the researcher has determined that posttest reading fluency scores in the three-student group and six-student group did not differ significantly. The researcher did find that the reading fluency scores on the posttest were higher for the small group than for the larger group, but the scores were not significantly higher.

Along with collecting data for reading fluency, the researcher also collected data for reading level accuracy. The researcher found that, similar to the reading fluency scores, the reading level accuracy scores for students in both groups increased, as well; however, the results are not significant enough to reject the hypothesis.

Implications of the Study

The results show that the reading fluency score difference between reading groups was not significant. However, the researcher observed other differences between both reading groups that are important to discuss.

While working with the three-student group and six-student group, the researcher observed that she had more teaching time with the three-student group. The researcher never had to rush through a lesson; in contrast, she was unable to finish some lessons with the larger six-student group.

With the three-student group only, the researcher was also able to focus on fluency and, in addition, was able to teach other valuable reading skills such as reading comprehension. By

experiencing these extras, the students in the small group were able to have a better grasp on the story selections than those in the six-student group.

Lastly, the fluency activities used while teaching were able to be extended in the small group only. The researcher was able to do more repeated readings and work on other fluency strategies during their small group time. This allowed for more fluency practice.

The main reason that there was more teaching time with the small group as opposed to the larger group was due to the students' attention spans. The researcher noted that the three-student group paid more attention to lessons and, as a result, were able to get more done within the small group lessons. Overall, working with fewer students allows for fewer disruptions and more learning.

Threats to Validity

Throughout this study, some of the major threats to validity involved the duration of the study, group size, the sample, and the pretest scores.

The timeframe used for this study was eight weeks. Due to the weather this winter, there were many unpredicted gaps in the school week. Along with the challenges imposed by missed instructional time, reading studies normally take a longer time to show improvement, which is why reading levels are usually checked three–four times a school year.

Both groups were relatively small in size. A normal sized group in the researcher's first grade class is between eight and ten students. Even with the larger group consisting of only six students, it was still a smaller group than the norm. If the researcher had used a larger sample, the difference in group sizes may have been a better indicator for the study.

The sample selection for this study was convenient since the researcher used her own first grade class. The researcher was limited to using students in her class; however, a more diverse

selection would have resulted in a stronger study. Ideally, the sample would have consisted of students randomly selected from all of the first grade classrooms and would have been based on reading levels and fluency scores.

Lastly, the pretest scores in both groups were fairly high to begin with so there was not much room for maturation. Due to the short amount of time and the pretest scores, the students who participated in the study were unable to demonstrate larger strides in posttest scores.

Theoretical Consequences

The results did not support some of the theories that were discussed in Chapter II. It was believed that, regarding fluency, students in the smaller group would score higher than those in the larger group setting. The results of this study demonstrate that group size does not make a significant difference in reading fluency scores.

However, some of the types of reading fluency strategies discussed in Chapter II, such as repeated reading, Reader's Theater, and wide reading were all successfully used during the study. The strategies did allow for reading fluency improvement with both groups, despite the lack of statistical significance of the results.

Reading fluency takes a lot of practice, as discussed in Chapter II. Perhaps the best known of the reading interventions designed to support fluency development is repeated reading (Kuhn et al., 2000). Students in both groups were able to spend an ample amount of time using the repeated reading strategy in the small group setting.

Another reading fluency strategy related to repeated reading that was used during this study was Reader's Theater. Marr et al. (2011) found that "peer-mediated instruction in which students work together to support each other is an evidence-based practice for improving

performance in a variety of academic areas” (p. 261). Overall, Reader’s Theater is a form of repeated reading in that it helps to develop fluency through repeated exposure to the text.

Finally, wide reading was another regular strategy used during the study. However, due to the size of the group, the researcher was able to employ the wide reading strategy with the three-student group more than with to the six-student group. In 2005, Kuhn found that wide reading and repeated reading have similar effects on fluency; however, when students wide read, they are improving their comprehension much more than with repeated reading. The researcher in the current study observed that the three-student group’s fluency and comprehension improved throughout the eight weeks.

Suggestions for Future Research

If the researcher were to conduct this research again, she would do some things differently. When implementing a reading intervention, time is one of the most valuable variables. The researcher believes that she may have had more accurate and significant results had the study been longer.

Another suggestion for the future would be to use a larger sample. The population used in this study was only nine students. Results would have been more accurate and more informative if a larger sample size had been available. Keeping the small group at three students and making the larger group have a total of nine students would be ideal because a normal group in the researcher’s school is between seven to ten students.

Lastly, next time the researcher would work with low-level students as opposed to on-level students in order to enable the study to examine growth in greater detail. In the current study, the selected student sample scored higher than expected during pretesting and, therefore, less measurable growth was observed.

References

- About the International Baccalaureate. (2014). In *ibo.org*. Retrieved from <http://www.ibo.org/mission/>
- Ari, O. (2010). Fluency interventions for developmental readers: Wide reading and repeated readings. *Research and Teaching in Development Education*, 28(1), 5–15. Retrieved from http://www.academia.edu/1508103/Fluency_Interventions_for_Developmental_Readers_Wide_Reading_and_Repeated_Readings
- Buchanan, S. A. (2006). *Effects of fluency instruction on literacy skills in the first grade classroom. Online Submission*, 1–17. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=ED494425&site=ehost-live>
- Cornwell, L. (2013) *What is Readers Theater?* Retrieved from <http://www.scholastic.com/librarians/programs/whatisrt.htm>
- Fountas, I.C., & Pinnell, G.S. (2011). *Assessment guide: a guide to benchmark assessment system I*. (2nd ed.). Portsmouth, NH: Heinemann
- Good, R. Kaminski, R. (2009). *Dynamic measurement group*. Retrieved from <http://dibels.org/dibels.html>
- Graves, B.B, Graves, M.F. & Juel, C. (2007). *Teaching reading in the 21st century*. Boston, MA: Pearson Education, Inc.
- Kuhn, M. (2004). Helping students become accurate, expressive readers: Fluency instruction for small groups. *Reading Teacher*, 58(4), 338–344. Retrieved from

<http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ684400&site=ehost-live;>

Kuhn, M. (2005). A comparative study of small group fluency instruction. *Reading Psychology, an International Quarterly*, 26(2), 127–146. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ692255&site=ehost-live>; <http://taylorandfrancis.metapress.com/link.asp?target=contribution&id=N53570108Q1TQ531>

Kuhn, M. R., & Stahl, S. A., & Center for the Improvement of Early Reading Achievement, (2000). *Fluency: A review of developmental and remedial practices*, 1–47. Retrieved from <http://www.eric.ed.gov/contentdelivery/servlet/ERICServlet?accno=ED438530>

Macmillan & McGraw-Hill, (2006). Treasures reading. Retrieved from <http://www.macmillanmh.com/reading/>

Marr, M. B., Algozzine, B., Nicholson, K., & Dugan, K. K. (2011). Building oral reading fluency with peer coaching. *Remedial and Special Education*, 32(3), 256–264. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ922664&site=ehost-live>; <http://dx.doi.org/10.1177/0741932510362202>

Maryland State Department of Education. (2014). Retrieved from <http://www.marylandpublicschools.org/>

Morgan, P. L., Farkas, G., Tufis, P. A., & Sperling, R. A. (2008). Are reading and behavior problems risk factors for each other? *Journal of Learning Disabilities*, 41(5), 417–436.

Retrieved from

<http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ806367&site=ehost-live>; <http://dx.doi.org/10.1177/0022219408321123>

Riedel, B. W. (2007). The relation between DIBELS, reading comprehension, and vocabulary in urban first-grade students. *Reading Research Quarterly*, 42(4), 546–567. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ776733&site=ehost-live>; <http://dx.doi.org/10.1598/RRQ.42.4.5>

Shea, M. (2012). *Running records: Authentic instruction in early childhood education*.

Routledge, Taylor & Francis Group. 1–176. Retrieved from

<http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=ED534871&site=ehost-live>; <http://www.routledge.com/books/details/9780415503815/>

The art and science of teaching reading fluency. (2011). *Handbook of research on teaching the English language arts*. London, United Kingdom: Routledge.

Tindall, E., & Nisbet, D. (2010). Exploring the essential components of reading. *Journal of Adult Education*, 39(1), 1–9. Retrieved from

<http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ891080&site=ehost-live>

Torgesen, J. K., Wagner, R. K., Rashotte, C. A., & Herron, (1997). Prevention and remediation of severe reading disabilities: Keeping the end in mind. *Scientific Studies of Reading*, 217–234.