Increasing Oral Reading Fluency: An Examination of a Small Group Reading Intervention

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Research comparing one-on-one and small group reading fluency interventions suggests that both types of intervention may result in similar improvements in students’ reading fluency (Vaughn et al., 2003; NICHD, 2000; Begeny & Silber, 2006). Nevertheless, small group interventions are thought to be a more efficient strategy for helping students achieve greater success in reading (NICHD, 2000; Begeny & Silber, 2006). The purpose of this study was to examine whether an intervention package including modeling, repeated reading, performance feedback, and error correction would result in similar fluency performance for students when implemented in a 1:1 setting compared to a 2:1 setting. This study examined data from an academic intervention program delivered by undergraduate students from a mid-sized public university in the Midwest to students in an elementary school. This study used a single-case research design (i.e., ABC) to compare six elementary-aged students’ rate of progress in reading fluency during the intervention when it was implemented in a one-on-one setting to their
rate of progress when it was implemented in groups of two. Rate of progress in number of words read correctly per minute on AIMSweb R-CBM reading passages was evaluated for each student during baseline (A), 1:1 intervention (B), and 2:1 intervention (C) phases. Results indicated that three of the students’ rate of progress during the small group intervention was similar to rate of progress during one-on-one implementation of the intervention. These results demonstrate how small group implementation of a reading intervention can be comparable to one-on-one intervention for increasing students’ oral reading fluency.

*Keywords*: reading intervention, small groups, oral reading fluency
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CHAPTER I

Introduction

Statement of the Problem

Many students in the nation struggle to learn to read throughout their entire educational experience. As a result, educators work extensively to help these students achieve greater reading success. According to analyses of academic proficiency data, only 31% of the nation’s graduating students are proficient in reading (Peterson, Woessman, Hanushek, & Lastra-Anadón, 2011). These data suggest that many students are in need of greater help in order to become more successful readers. Furthermore, reading is a key component for successful development of critical learning in other areas of academics. When a student has difficulty reading, this impacts his or her ability to comprehend and subsequently learn other academic material, such as science and math (Therrien, 2004). Due to the significant impact reading has on overall learning, and the large number of students who are struggling to achieve proficiency, educators have worked to develop interventions that are more efficient and can be provided to larger number of students at once (Rashotene, MacPhee, & Torgesen, 2001). Research on the developmental processes of reading has revealed that interventions can facilitate the development of necessary skills for proficient reading (NICHD, 2000)

Purpose of the study. Due to the significant impact reading has on students’ overall learning and academic achievement, practitioners should examine the utility of reading interventions that are designed to quickly and efficiently build students’ reading fluency skills. The current study examined whether an intervention package including modeling, repeated reading, performance feedback, and error correction results in similar fluency performance for
students when implemented in a 1:1 (i.e. one student and one interventionist) setting compared to a 2:1 (i.e. two students and one interventionist) setting.

**Research question.** The purpose of this study was to answer the following question: Is the rate of improvement in oral reading fluency during implementation of an intervention package including modeling, repeated reading, performance feedback, and error correction similar when implemented in a 1:1 setting compared to a 2:1 setting?
CHAPTER II

Review of the Literature

This paper will first review the literature regarding the development of reading skills. It will then explain the importance of reading fluency on students’ ability to read successfully and subsequently understand and learn academic material. This paper will then discuss the literature on reading fluency intervention strategies, such as repeated reading and listening passage preview. It will also discuss how these intervention strategies can be successfully implemented in small groups. The use of curriculum-based measures in reading and small-case design research in this study will also be discussed.

Components of Reading

**Phonemic awareness.** Development of reading ability begins with phonemic awareness, in which children learn to hear and manipulate individual sounds in spoken language. Children then learn to use their knowledge of spoken language to begin learning phonics skills. The ability to connect sounds in spoken language also promotes the identification of sounds sequences in words (Ehri, Nunes, Willows, Schuster, Yaghoub-Zadeh, & Shanahan, 2001). For example, phonemic awareness skills are used to understand the sounds in the word “bat.” The word is separated into three individual phonemes, /b/ /a/ /t/. The individual phonemes are then blended together to create the spoken word “bat.” The spoken word, “dish,” is also broken into three individual phonemes, /d/ /i/ /sh/. The sequence of sounds is blended together to create the spoken word, “dish.”

**Phonics.** Phonics skills allow children to associate the sounds they hear in spoken language to written letters and words. The alphabetic principle is the knowledge that one’s language is constructed through letter sounds, and that the symbols for these letters also
represent the letter sounds (Schuele & Boudreau, 2008). Children then must develop the ability to connect spoken letter sounds to written words. This allows them to map sound to text (NICHD, 2000).

**Reading fluency.** Successfully developing phonemic awareness and phonics skills influences the ability to develop reading fluency (Ehri et al., 2001; NICHD, 2000). Fluency consists of the ability to read text quickly, accurately, and with appropriate expression (Stanovich, 1980; Begeny, Krouse, Ross, & Mitchell, 2009). Reading fluency is an essential component to successful and efficient reading ability. Maintaining the ability to read text quickly and accurately over time and generalize to reading all types of texts is also related to reading fluency skills.

Reading fluency is an essential component to enabling comprehension of text. The ability to read words quickly and accurately enables an individual to utilize cognitive effort to interpret the meaning of the words and text. The inability to quickly and accurately read interferes with one’s ability to attend to the meaning and understand the text; therein, the inability to understand text interferes with one’s ability to learn (Fuchs, Fuchs, Hosp, & Jenkins, 2001; Daly & Martens, 1994). If one is unable to read quickly and accurately, he or she is more likely to read words slowly and place greater effort in attempting to decode individual words. This interferes with the ability to place more effort in comprehending the text and may also lead to inaccurate interpretations of the text (Hudson, Lane, & Pullen, 2005; Schreiber, 1980; Samuels, 1979).

**Vocabulary.** One’s knowledge of words is also associated with efficient and accurate reading ability (Verhoeven, Van Leeuwe, & Vermeer, 2011). Vocabulary knowledge includes knowledge of a word’s meaning, as well as recognition of words that are familiar but whose
definition is unknown (Nation & Cocksey, 2009). Greater recognition of familiar words enables quicker reading skill acquisition (Verhoeven, Van Leeuwe, & Vermeer, 2011). Increased vocabulary knowledge also promotes development of reading comprehension. Specifically, one’s knowledge of the meaning of words increases the overall understanding of what is read. Decreased vocabulary knowledge is also believed to negatively impact one’s understanding of text (Beck, Perfetti, & McKeown, 1982).

**Comprehension.** Acquiring phonemic awareness, phonics, reading fluency, and vocabulary knowledge are essential for establishing reading comprehension (Hudson, Lane, & Pullen, 2005; Beck, Perfetti, & McKeown, 1982). Reading comprehension refers to the ability to consistently and purposefully think about the meaning of what is read (NICHD, 2000). In general, the ultimate goal of reading is to understand and comprehend text. Comprehension of text not only requires proficiency in reading fluency and vocabulary knowledge, but also requires engagement in intentional monitoring of one’s understanding while reading, as well as later reflecting on the reading. The ability to use cognitive resources to thoroughly think about and reflect on text not only increases one’s overall understanding of text, but also increases overall learning (NICHD, 2000; Paris & Myers, 1981; Cain, 1999).

**Research on Reading Fluency Interventions**

**Reading fluency interventions.** The importance of reading fluency for successful reading has led to the development of interventions aimed to increase reading fluency among struggling readers. Research suggests that reading interventions that focus on guided oral reading positively impact fluency and comprehension (NICHD, 2000). Interventions that involve repeated reading require students to repeatedly read passages orally, and provide feedback on the accuracy of the reading. These interventions have demonstrated benefits in
increasing students' word recognition, fluency, and comprehension (NICHHD, 2000; Therrien, 2004). Evidence also suggests reading interventions that include listening passage preview, which includes an adult modeling reading of a passage out loud while the student follows along, is also effective in increasing oral reading fluency (Daly & Martens, 1994). Furthermore, studies have found oral reading fluency may increase the most when reading interventions combine listening passage preview, repeated readings, and feedback on reading accuracy and performance (Begeny & Silber, 2006).

**Repeated Reading**

Research on reading fluency interventions yields strategies appropriate for increasing students’ reading fluency skills. One such form of a reading fluency intervention is repeated reading. Research examining the effectiveness of reading fluency interventions suggests that repeated reading interventions are effective for increasing reading fluency and comprehension for both students with and without disabilities. Therrien (2004) conducted a meta-analysis examining studies that implemented repeated reading to students with and without a learning disability to determine the effects of the interventions on reading fluency and comprehension. How well students’ fluency and comprehension transferred to reading text following the interventions was also examined. A total of 33 studies using a variety of methods to implement repeated reading interventions were examined to determine the effects of the interventions. Analyses revealed that repeated reading increased reading fluency and comprehension among students with and without a learning disability, though increases in fluency were slightly larger among the students than increases in comprehension of text. Furthermore, students’ fluency and comprehension increased on intervention passages in which the students read multiple times, as well as on novel passages (Therrien, 2004).
Interventions that implemented three to four repetitions of reading from the same passage showed greater increases in reading fluency as compared to when the passages were read twice. Correcting errors such as mispronunciations and omission of words while a student read was also associated with greater increases in reading fluency (Therrien, 2004). The findings from the meta-analysis suggest that reading interventions that implement numerous repetitions of reading a passage result in increases in fluency and comprehension of the passage, and increase the likelihood the student will maintain these skills when exposed to new reading material. These findings also suggest that providing corrections of errors while reading is also effective for increasing students’ reading fluency (Therrien, 2004).

**Listening Passage Preview**

Research examining reading interventions to promote reading fluency have not only revealed that repeated reading interventions are effective in increasing fluency, but have also provided evidence to show that modeling the reading of a passage while the student follows along is also effective for increasing reading fluency. A specific type of a modeling intervention frequently implemented with students is called Listening Passage Preview (LPP). Many studies have examined the effects of LPP reading interventions on increasing reading fluency among students with a specific learning disability in reading. Daly and Martens (1994) describe the effects of an LPP reading intervention on students’ oral reading performance by comparing reading interventions that included listening passage preview, subject passage preview, and an intervention using audio-taped words. Four 5th grade students with learning disabilities in reading were delivered each intervention at least once. The subject passage preview intervention consisted of the student reading a passage orally without help from the interventionist, and subsequently read a list of difficult words from the passage. The taped words intervention
required the student to read along out loud with an audiotape of a word list assigned for that day two times, and subsequently read a passage containing the words for one minute. The LPP intervention required the student to listen to an audiotape of the passage while following along with his finger. Analysis of the number of words the students read correctly revealed that the students demonstrated the greatest increase in number of words read correctly when exposed to the LPP intervention. The findings from this study are similar to findings from previous research suggesting that modeling reading through LPP is more effective at increasing oral reading fluency than solely previewing difficult words or reading a passage multiple times without assistance (Rose & Beattie, 1986; Rose, 1984). However, because the findings from this study are based on the reading fluency of a small number of individual students, findings may not be generalizable to all students who struggle with reading fluency.

Although LPP reading interventions appear to increase oral reading fluency, the mode with which the modeling of reading passages is delivered to students may also influence how effective these interventions are for increasing oral reading fluency. Swain, Leader-Janssen, and Conley (2013) compared the effectiveness of repeated reading, audio listening passage preview, and teacher modeled listening passage preview. During the repeated reading intervention, a student was required to read each passage twice for one minute each time. During the audio LPP intervention the student listened to an audio-recorded passage on a computer two times. After listening to the passage on the computer, the student read the passage aloud for one minute. The LPP intervention consisted of the researcher reading a passage as the student followed along. After the student listened to the reading of the passage, he then also read the passage aloud for one minute. The number of words read correct and errors made were recorded during each intervention. Analysis of the student’s rate of improvement in each intervention according to the
number of words read correctly by the end of the sessions revealed that the student displayed the
greatest rate of improvement during the teacher modeled LPP intervention. Results from this
suggest that LPP reading interventions are most effective for increasing students’ reading fluency
when implemented directly via a teacher or interventionist (Swain, Leader-Janssen, & Conley,
2013).

As described above, LPP reading interventions appear to have many benefits for
increasing students’ reading fluency. Findings from the research on LPP interventions suggest
that when these interventions are delivered to students directly, rather than through audio
recordings, students achieve greater oral reading fluency (Swain, Leader-Janssen, & Conley,
2013). Furthermore, LPP interventions may be more effective in increasing students’ reading
fluency and producing maintained gains, than previewing difficult words or reading a passage
multiple times (Daly & Martens, 1994). Nevertheless, a possible limitation of research
examining the effects of LPP is the fact that the majority of the research is conducted using
students with a specific learning disability in reading. As a result, findings from the research
may not be generalizable to all students, or students without a specific learning disability in
reading.

**RR and LPP**

Research examining the effects of listening passage preview reading interventions reveals
that combining listening passage preview and repeated reading is also effective for increasing
students’ oral reading fluency. Kupzyk, Daly, and Andersen (2012) examined the effects of a
combined intervention utilizing both listening passage preview and repeated reading on eight 1st
grade students’ oral reading fluency. The intervention consisted of each student reading a
passage aloud for one minute as their parent timed the student and recorded the number of words
read correctly and errors made. The parent then read the passage to the student as the student followed along. The student was then required to read the entire passage two times. The parent corrected the student’s errors and required the student to repeat the word as they read. After the student read the entire passage twice, they completed a final read of the passage for one minute as the parent recorded the number of words read correct. Following the intervention, the number of words read correct by seven of the students significantly increased. The findings from this study demonstrate how combining both listening passage preview and repeated reading is effective for increasing students’ oral reading fluency.

**Small Group Interventions**

In order to meet the needs of a growing number of struggling readers, methods have been developed for implementing interventions to more students at once to increase efficiency. According to research, providing small-group-based reading interventions is a more efficient strategy for helping many students achieve greater success in reading (NICHD, 2000). Comparison of students’ progress in reading comprehension, phoneme segmentation, and reading fluency when implemented reading intervention one-on-one versus in groups of three students, reveals that small group interventions are equally effective for increasing students’ fluency, comprehension, and phoneme segmentation skills. Furthermore, students’ advancement in these reading skills are as adequate when interventions are implemented in small groups as when the interventions are implemented to students one-on-one (Vaughn et al., 2003). Analysis of reading interventions utilizing repeated reading and listening passage preview reveals that these types of interventions can also be effectively implemented in small groups, and result in gains in reading fluency (Begeny & Silber, 2006).
**Small groups, RR, and LPP.** Not only are repeated reading and listening passage preview interventions effective for increasing reading fluency, but research examining small group interventions also suggests that both repeated reading and listening passage preview interventions can effectively increase students’ reading fluency when implemented in small groups. Begeny, Krouse, Ross, and Mitchell (2009) compared the effectiveness of listening passage preview, repeated reading, and listening only interventions when implemented to 2nd grade students in small groups. The listening passage preview intervention consisted of a researcher reading three different passages twice as the students followed along. During the repeated reading intervention, the researcher chose one student to read a passage aloud as the others read along in a softer tone. The passage was read twice, with a different student leading the reading each time. During the listening only intervention the students listened as the researcher read a passage aloud. Students’ median scores in the repeated reading intervention were often higher than scores in the listening passage preview condition, though the difference in scores was small. Both interventions were higher than the listening only and control interventions. The findings from this study demonstrate that both repeated reading and listening passage preview reading interventions can be effectively implemented to small groups of students to increase reading fluency.

Other research has compared the effectiveness of small group and one-one-on implementation of repeated reading and listening passage preview interventions. For example, Klubnik and Ardoin (2010) examined the effects of a small group reading intervention implemented to six female 2nd grade students identified as having difficulties in reading. These students received a reading intervention that combined repeated reading, listening passage preview, and error correction. The intervention was implemented to three of the students at a
time and required each student to follow along with her finger as the researcher read a passage. The students then took turns reading one sentence at a time until they had read the entire passage three times. If an error was made while reading, all three students were required to repeat the word. A one-on-one intervention was also implemented to each student and consisted of a similar procedure, though the student read the passage on her own after listening to the researcher read the passage. The number of words the students read correctly in the interventions sessions was compared across the different conditions. Four of the six students increased in the number of words read correctly following the intervention in both the small group and one-on-one reading administrations of the intervention. The findings from this study suggest that reading interventions that combine repeated reading, listening passage preview, and error correction, are effective for increasing reading fluency. Furthermore, these findings suggest that implementation of these interventions in small groups is as effective for increasing reading fluency as individually administered interventions.

Research examining the effects of small group reading interventions also suggests that combining repeated reading, listening passage preview, and practice of difficult words is effective for increasing students’ oral reading fluency. Begeny and Silber (2006) examined the effects of a small group reading interventions by comparing students’ oral reading fluency in interventions that implemented training in difficult words and listening passage preview, training of difficult words and repeated reading, listening passage preview and repeated reading, and a combination utilizing all three types of intervention. Four 3rd grade students received these intervention packages as a group. The training of difficult words intervention required the students to state a list of 20 words presented by the researcher. The listening passage preview intervention required the researcher to read a passage aloud while each student followed along by
pointing on his or her own copy of the passage. The repeated reading intervention required the students to pair together and take turns reading a passage to each other, each student reading the passage twice. Comparison of words read correctly in a minute and the students’ score on his or her reading of the passages two days later, revealed that the combination of training in difficult words, listening passage preview, and repeated reading resulted in the greatest increases in words read correctly. The findings from this study suggest that reading interventions are most effective in increasing reading fluency when combining training in difficult words, repeated reading, and listening passage preview, and that these gains are maintained over time.

When implementing repeated reading interventions in small groups, one strategy for engaging all students to read in the group is the use of choral reading, in which the students read a passage out loud at the same time (Begeny, Krouse, Ross, & Mitchell, 2009). Similarly, classroom teachers also often implement choral reading during direct instruction in classrooms. For example, teachers frequently conduct “whole class reading,” whereby the teacher models reading a passage out loud and subsequently requires the class as a whole to read the passage out loud together. During this time, the teacher also provides error correction and opportunities for the students to practice difficult words. Research suggests that choral reading instruction combined with error correction and practice with difficult words also improves students’ decoding and oral reading fluency skills (Vaughn et al., 2003; Paige, 2011).

Research on reading fluency interventions suggests that repeated reading and listening passage preview are effective intervention strategies for increasing students’ reading fluency and producing gains in fluency that maintain over time; furthermore, when implemented in small groups, these interventions are equally effective at increasing reading fluency as when implemented one-on-one. However, limitations related to the research on repeated reading,
listening passage preview, and small group interventions implementing these strategies limit the findings in the literature. One such weakness is that most studies investigating the effects of these interventions on students’ reading fluency include small sample sizes. As a result, findings from these studies may not generalize to all students struggling with reading fluency. The limited amount of research on repeated reading, listening passage preview, and implementation of these interventions in small groups also interferes with the generalizability of these findings. Few studies have examined the effects of combined reading interventions that incorporate repeated reading, listening passage preview, and error correction on students’ reading fluency. Furthermore, few of these studies have analyzed the effectiveness of these combined interventions on increasing reading fluency when administered in small groups. Research on whether these small group interventions are as equally effective for improving reading fluency compared to individualized interventions is also limited.

**Curriculum-Based Measurements**

In order to determine a student’s progress in an academic area as a result of receiving instruction, evidence-based tools must be used to measure the student’s academic skills. Curriculum-based measures (CBM) are tools that are used to assess students’ growth and progress in an academic area, as well as to evaluate the effectiveness of an intervention (Deno, 2003). These measures are specifically designed to assess students’ skills relative to the content they are exposed to within the classroom curriculum. CBMs allow educators to efficiently and effectively monitor students’ progress in a curriculum, and derive conclusions about where each student’s skills are relative to what is expected. Not only are curriculum-based measures quick and efficient to use, but evidence suggests that they also provide a reliable and valid estimate of students’ skills (Deno, 1985).
**CBM of Reading.** In order to determine the effect a reading intervention, reliable and valid tools must be used to measure students’ reading skills after exposure to the intervention. Curriculum-based measurement of reading (CBM-R) is one type of assessment that is often used to screen and monitor students’ reading progress during a reading intervention. CBM-R specifically measures students’ rate and level of reading achievement by measuring how quickly and accurately a student reads aloud within one minute. Measurement of a students’ reading rate requires the individual administering the CBM-R, such as a teacher or interventionist, to follow a standardized protocol in order to calculate the number of words the student reads correct in a minute (WRCM) while reading a passage. The administrator of the CBM-R also records the number of errors the student makes while reading, such as omissions, mispronunciations, and transpositions of words. The students’ WRCM score is then compared to same-age peers to determine his or her reading level (Christ, White, Ardonin, & Eckert, 2013). CBM-R is a valid and reliable measure of students’ reading progress, informs educators about students’ reading proficiency, and is predictive of reading comprehension and achievement (Wayman, Wiley, Ticha, & Espin, 2007).

**Single-Case Designs**

In order to determine the effects of the reading intervention implemented in this study using a small number of subjects, a single-case design methodology was used. Single-case design is a form of experimental methodology that is frequently used to compare the effects of different interventions within and/or across participants (Riley-Tillman & Burns, 2009). Single-case design research is most often used to determine the causal relationship between an independent variable, such as an academic intervention, and a dependent variable, such as a student’s academic performance. This type of research also requires comparisons to be made
between and within-subjects in order to help ensure validity of the findings. Single-case designs can include multiple subjects at once. In such cases, the subject is his or her own control to determine the effects of the intervention. In order to measure the experimental control, the independent variable is directly manipulated. Effects across the different conditions of the independent variable are then typically compared to the subjects' performance during baseline. Baseline is the point in the research prior to the subjects' exposure to the experimental conditions/independent variable (Horner et al., 2005). In general, the purpose of using single-case designs is to document a change in the dependent variable, determine if the observed change is due to the independent variable, and conclude whether the change is generalizable across various settings and situations (Riley-Tillman & Burns, 2009).

**Single-Case Designs in Schools.** In educational settings, single-case design research is often used to determine the effects of academic and/or behavioral interventions for specific students. Using single-case designs in schools allows educators to determine the effects of the intervention and precisely how the intervention affected change in the student. This design of research also allows educators to determine whether the intervention can be effectively implemented in the future with the same student, and whether the intervention can be implemented to other students. Replication of the effects of the intervention across different settings and interventionists within the school helps educators conclude whether the intervention can be successfully implemented to larger groups of students with similar academic and/or behavioral challenges (Riley-Tillman & Burns, 2009).

**Present Study**

This paper reviews the literature on the effects of repeated reading and listening passage preview reading interventions implemented in schools that focus on increasing students’ reading
fluency, as well as how these interventions are combined and implemented to small groups of students. Analysis of the research suggests that reading interventions that utilize repeated reading and listening passage preview are effective for increasing students’ reading fluency; furthermore these interventions are as equally effective at increasing reading fluency when implemented in small groups as when implemented one-on-one.

The purpose of this study was to answer the following question: Does the rate of improvement in oral reading fluency during implementation of an intervention package including modeling, repeated reading, performance feedback, and error correction result in similar fluency performance for students when implemented in a 1:1 setting compared to a 2:1 setting?
CHAPTER III

Method

Participants and Setting

A total of six students ages 8 to 11 identified as struggling readers based on below average performance on school benchmark testing participated in this study. This sample consisted of individuals in grades three through five (3 males, 3 females) from a small private school in the Upper Midwest. The school’s total population consists of 78 students (94% Caucasian, 1% Hispanic, and 5% two or more races). Nathan, Dan, and Liz were 5th grade students and received 14-16 intervention sessions total. Amanda was in the 4th grade and received a total of 15 intervention sessions. Edward and Kim were in 3rd grade and received 15 and 16 intervention sessions respectively. During the small group implementation of the intervention, the students were paired based on similar reading speed and accuracy. As a result, the students were paired as such: Nathan and Dan, Liz and Amanda, and Edward and Kim.

Dependent Variable

In order to measure the effects of the reading intervention, the students read from curriculum based measures of oral reading fluency. Specifically, AIMSweb oral reading fluency (ORF) passages were administered once a week (AIMSweb, 2014). Students read aloud a grade level ORF passage for one minute while the interventionist recorded the number of words read correctly and errors made within the minute (WRCM).

WRCM was also calculated during each intervention session by recording number of words read correct in a minute prior to starting the reading intervention, and once again after completing the reading intervention. Students read a Read Naturally reading passage (Read Naturally, 2009) for one minute prior to beginning the intervention, and subsequently graphed
this score as a “cold score.” The students then read the same passage once more after the intervention, and graphed this scores as a “hot score.”

Materials

During the intervention sessions, each student was administered a reading passage. The reading passages were obtained from the Read Naturally reading intervention program. The Read Naturally reading intervention includes 24 high-interest non-fiction reading passages for grades 1-8. The purpose of the Read Naturally intervention is to implement components of repeated reading and listening passage preview by requiring students to listen to an audio recorded reading of the passage and re-read the passage to him or her self multiple times (Read Naturally, 2009). This study used the Read Naturally reading passages during the intervention sessions, and adapted components of the Read Naturally intervention.

Survey Level Assessment

Prior to implementation of the intervention, a survey level assessment was conducted in which each student was administered three grade-level AIMSweb R-CBM, as well as three R-CBM probes from one grade level below current grade level. Passages were administered and scored using the standardized procedures described previously. Determination of the students’ reading level was done by calculating which grade level (median) score the student was able to read between 70-100 words correct with 6 or fewer errors. This was used to determine the reading level of the Read Naturally reading passages and AIMSweb progress monitoring probes that were used for that student during the intervention. Survey level assessment revealed that all but one student, Liz, was reading within grade-level. As a result, the student received the reading intervention using materials from one grade level below.
General Procedures

A reading intervention combining LPP, repeated reading, and error correction was implemented for ten weeks starting in September 2014 and ending December 2014. Each participant was individually assigned a reading interventionist provided by a University sponsored intervention clinic. This clinic provides training to undergraduate students in order to implement academic interventions to students, particularly students struggling in reading. During the first five weeks, the undergraduate interventions implemented the reading intervention one-on-one with each student. During the last five weeks of the intervention, participants were assigned a reading partner for reading intervention. As a result, the interventionists implemented the intervention in small groups, with 2 students in each group. Each group was matched according to reading level as measured by a survey level assessment. The intervention was implemented twice a week for 30 minutes per session. During the intervention sessions, the interventionists measured each student’s oral reading fluency by recording the number of words read correctly on Read Naturally reading passages.

Intervention

During the intervention, the students were given a Read Naturally reading passage at the beginning of each intervention session. A different reading passage was used during each intervention session. The interventionist began the intervention session by reading the title and picture associated with that title from the reading passage for that day. He/she then read the student four difficult words from that passage provided at the top of the page. The interventionist stated each word individually and asked the student to define the word. The interventionist then read the definition of the word. He/she then asked the student to predict
what the story was going to be about based on the title, picture, and words. The student wrote
his or her prediction on the Read Naturally passage.

Next, the student(s) read the passage aloud for one minute. During this time, the
interventionist marked words read incorrectly and calculated the total number of words read
correct and errors made. The interventionist then told the student the number of words they read
correct and errors they made within that one-minute read. Correction of errors was not provided
during this time. The student graphed their score on a separate sheet of paper. During the small
group intervention, the students completed this one minute read of the passage separately.

The interventionist then read the entire passage aloud at a comfortable rate as the
student(s) followed along. After the interventionist finished reading the passage, the student(s)
read the entire passage aloud. During the small group intervention, the students read the passage
at the same time. The interventionist corrected the students’ reading errors as they read the
passage. When reading in pairs, both students were required to correct the error, regardless of
which student made the error while reading. Error correction was provided when the student
made mispronunciations, omissions, transpositions, and when the student paused for longer than
3 seconds to pronounce a word. After the student(s) completed reading the entire passage, the
interventionist then read the passage a final time. Following this, the student(s) also read the
entire passage with error correction a final time. The student(s) then answered 6-8
comprehension questions about the passage read. Following this, the student(s) read the passage
once more for one minute. Again, the interventionist marked words read incorrectly and
calculated the total number of words read correct and errors made. Correction of errors was not
provided during this time. The students graphed their score on a separate sheet of paper. During
the small group intervention, the students completed this final one minute read separately.
Progress Monitoring

Progress monitoring using AIMSweb ORF probes was also conducted once a week at the beginning of each intervention session using grade-level passages. Each student read the passage for one minute as the interventionist recorded words read correctly and number of errors. Correction of errors was not provided during these readings. During the time of the small group intervention, the interventionist administered the progress monitoring probe to one student at a time. As one student read the probe, the other was relocated to a separate room and was provided a word search puzzle as they waited. Scores obtained from these probes were used to measure rate of progress and determine whether the intervention was influencing the students’ reading fluency when reading grade-level material and whether these gains were maintained over time.

Design

A single case design (ABC) was used to examine progress in reading fluency for each of the 6 participants across conditions. Baseline performance in WRCM (A) was compared to performance during the first intervention phase in which participants received the intervention in a 1:1 setting (B) and to the second intervention phase in which participants received the same intervention in a 2:1 setting (C).

Training and Fidelity

Each interventionist attended a total of two hours of training provided by two School Psychology Graduate Students serving as lead coordinators for the Academic Intervention Clinic prior to beginning intervention at the school. The interventionists were also asked to practice with an acquaintance outside of the training prior to beginning the intervention. Training
consisted of demonstrations provided by the graduate students on how to administer the Read Naturally intervention and AIMSweb progress monitoring probes.

In order to measure interrater reliability and procedural integrity, iPods were used to audio record each intervention session. To measure interrater reliability (IRR), a graduate student from the AIC later listened to 50% of the audio recordings and independently scored words read correctly and errors on the passages. Simple percent agreement was calculated by dividing agreements by agreements plus disagreements. Mean IRR of the current study was 99% (range: 95-100%).

**Procedural Integrity.** In order to measure procedural integrity, a total of 50% of the intervention sessions were audio recorded and reviewed using the intervention checklist (See Appendix A). The interventionists were provided feedback on implementation of the intervention following review of the audio recordings. Interventionists exhibiting errors in intervention implementation were consulted with on an individual basis and provided feedback on how to implement the intervention correctly. This was done with the purpose of increasing fidelity of intervention implementation. One graduate and one undergraduate student trained in the intervention reviewed the audio recordings using the intervention checklist to assess whether the interventionists implemented the steps of the intervention correctly. The mean procedural integrity for the current study was 85% (range: 66-100%).
CHAPTER IV

Results

The research question addressed whether the rate of improvement in oral reading fluency during implementation of an intervention including modeling, repeated reading, performance feedback, and error correction resulted in similar fluency performance when implemented in a 1:1 setting compared to a 2:1 setting. Differences in performance between baseline and the two treatment conditions were assessed using visual analysis of changes in level, trend, and variability, as well as the timing of those changes across phases (Figure 1 through 6). Comparisons of mean, median, and range of reading fluency scores for each student were also examined across the one-on-one and small group implementation of the intervention (Table 1 and 2).

Words Read Correct Per Minute

Figures 1-6 display participants' words read correct per minute on AIMSweb R-CBM progress monitoring passages. The figures reflect baseline (A), one-one-one implementation of intervention (B), and small group implementation of the intervention (C). Table 1 summarizes the mean, median, and range of words read correct per minute (WRCM) for each student across baseline and one-on-one implementation of the intervention. Table 2 summarizes the mean, median, and range of ORF scores for small group implementation of the reading intervention.
Nathan

![Graph showing reading performance over time]

*Figure 1.* Nathan’s Words Read Correct Per Minute (WRCM). The line graph depicts Nathan’s WRCM prior to and during the one-one-one (1:1) and small group (2:1) implementation of the reading intervention.

Figure 1 represents Nathan’s WRCM scores. Nathan demonstrated a slight increase in WRCM during the one-on-one implementation of the intervention (mean = 106 WRCM; range = 87-114). During the small group implementation of the intervention, his WRCM gradually decreased (mean = 102 WRCM). As shown in Table 1, Nathan’s WRCM during small group intervention was also more variable (range = 79-121 WRCM). His reading errors remained consistently low across both interventions. Overall, he did not make significant gains in WRCM in either one-on-on or small group intervention in order to catch up to the reading level of similar age peers.
Amanda

![Graph showing Words Read Correct Per Minute (WRCM) for Amanda across different dates and conditions: BSL, 1:1, and 2:1. The graph includes lines for WCPM and Errors.](image)

*Figure 2.* Words Read Correct Per Minute (WRCM). The line graph depicts Amanda’s WRCM prior to and during the one-one-one (1:1) and small group (2:1) implementation of the reading intervention.

Figure 2 represents Amanda’s WRCM. Amanda demonstrated a consistent increasing trend in WRCM across both 1:1 (mean = 94 WRCM; range = 63-109 WRCM) and 2:1 implementation of the intervention (mean = 107 WRCM; range = 95-118 WRCM). Her errors also consistently decreased over time. Overall, her WRCM scores consistently increased at a rate that was fast enough to catch up to the reading level of similar age peers.
Edward

![Graph showing Words Read Correct Per Minute (WRCM) for Edward with BSL, 1:1, and 2:1 conditions over time.]

**Figure 3.** Words Read Correct Per Minute (WRCM). The line graph depicts Edward’s WRCM prior to and during the one-one-one (1:1) and small group (2:1) implementation of the reading intervention.

Figure 2 represents Edward’s WRCM. Edward demonstrated a consistent increasing trend in WRCM across both 1:1 (mean = 56 WRCM; range = 42-67 WRCM) and 2:1 (mean = 72 WRCM; range = 64-81 WRCM) implementation of the reading intervention. Edward’s errors also decreased consistently across both interventions. Overall, his WRCM consistently increased at a rate that was fast enough to catch up to the reading level of similar age peers.
**Figure 4.** Words Read Correct Per Minute (WRCM). The line graph depicts Kim’s WRCM prior to and during the one-one-one (1:1) and small group (2:1) implementation of the reading intervention.

Figure 4 represents Kim’s WRCM. Kim demonstrated a consistent increasing trend in WRCM across both 1:1 (mean = 53 WRCM; range = 36-67 WRCM) and 2:1 (mean = 73 WRCM; range = 65-82 WRCM) implementation of the intervention. Her errors also consistently decreased over time. Overall, her WRCM consistently increased at a rate that was fast enough to catch up to the reading level of similar age peers.
Figure 5. Words Read Correct Per Minute (WRCM). The line graph depicts Dan's WRCM prior to and during the one-one-one (1:1) and small group (2:1) implementation of the reading intervention.

Figure 5 represents Dan's WRCM. Dan demonstrated a more consistent increasing trend in WRCM during 1:1 implementation of the reading intervention (mean = 128 WRCM; range = 106-154 WRCM). Dan demonstrated a consistent decrease in WRCM during 2:1 implementation of the intervention (mean = 115 WRCM; range = 106-125 WRCM). His errors remained consistently low across both conditions of the intervention. Overall, Dan made significant enough gains during 1:1 intervention to catch up to similar age peers. However, he did not make these same gains during the 2:1 intervention.
Figure 6. Words Read Correct Per Minute (WRCM). The line graph depicts Liz’s WRCM prior to and during the one-one-one (1:1) and small group (2:1) implementation of the reading intervention.

Figure 6 represents Liz’s WRCM across 1:1 and 2:1 implementation of the reading intervention. Liz’s WRCM displayed an inconsistent trend across both 1:1 (mean = 103 WRCM; range = 81-123 WRCM) and 2:1 (mean = 107 WRCM; range = 86-131 WRCM) reading intervention. However, her reading errors decreased consistently across both interventions. Liz’s WRCM skills did not increase at a rate fast enough to decrease the gap between her reading performance and the performance expected of same-age peers.
Table 1

*Participants’ WRCM for 1:1*

<table>
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<th>Participant</th>
<th>Baseline (CWPM)</th>
<th>Median CWPM</th>
<th>Mean CWPM</th>
<th>Range CWPM</th>
<th>Slope (Rate of Progress)</th>
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<tr>
<td>Nathan</td>
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Table 2

*Participants’ WRCM for 2:1*

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<th>Mean CWPM</th>
<th>Range CWPM</th>
<th>Slope (Rate of Progress)</th>
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</thead>
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<tr>
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Chapter V
Discussion

The current study investigated whether the rate of improvement in oral reading fluency during implementation of a combined modeling, repeated reading, performance feedback, and error correction intervention in small groups is similar to rate of improvement when the intervention is implemented one-on-one.

The results extend the literature on small group reading fluency interventions by comparing students’ rate of growth in reading fluency with rate of growth during one-on-one implementation of the intervention. Findings from this study demonstrate that in comparison, one-on-one and small group implementation of a combined reading intervention focus on repeated reading, listening passage preview, performance feedback, and error correction resulted in similar gains in oral reading fluency. The results of this study coincide with previous research suggesting that implementing a reading intervention targeting repeated reading, phonological awareness, and the alphabetic principle, in small groups of three resulted in similar gains in reading fluency, comprehension, and phoneme segmentation as when implemented one-on-one (Vaughn et al., 2003). Results from this study are also consistent with findings from Begeny and Silber (2006), suggesting that reading interventions that combine repeated reading and listening passage preview result in similar reading fluency gains when implemented in small groups, as when implemented one-on-one.

Limitations and Directions for Future Research

A potential limitation of this study derives from the small number of reading fluency data points collected during both one-on-one and small group implementation of the intervention. As a result, the interpretation of the findings is limited. Research suggests that oral reading fluency
progress monitoring is more valid and reliable when a greater number of data points are obtained. This research also suggests that the quality of data collection is still only marginal with just 6 data points (Thornblad & Christ, 2014). Another limitation is the small sample size used in the study. The small sample size limits the generalizability of the findings, as they may not be applicable to all students that struggle with reading fluency.

The majority of research on small group reading interventions focuses on how these interventions influence students’ oral reading fluency (Begeny, Krouse, Ross, & Mitchell, 2009; Begeny & Silber, 2006). Future research may benefit from also analyzing how small group reading interventions influence students’ reading comprehension in comparison to one-on-one reading interventions. Additionally, future research may consider examining the comparison between small group and one-on-one reading fluency interventions on students’ retention of reading fluency across time.

**Implications for Practice**

Though the current study yields limitations, the findings offer additional information on how schools can provide reading interventions in an efficient manner to greater numbers of students, yet retain an adequate level of quality. Educators may benefit from considering implementing small group interventions, as they require less use of already limited resources, such as staff and time.

The results from this study not only provide more information on small group reading interventions, but also provide additional insight on the utility of a combined repeated reading, listening passage preview, error correction, and performance feedback reading fluency intervention. Practitioners may benefit from using combined intervention packages implementing more than a single reading fluency component, rather than focusing on using
listening passage preview, repeated reading, error correction, and performance feedback in isolation.
References


Education, 37, 184-192.


Appendix A

Protocol Checklists for Reading Interventions
READ NATURALLY PROTOCOL

1. **Key Words and Picture.**
   Give the student the passage for the day.
   Say, "Today we are going to read about __________. Here is a picture of __________. Here are some important words to know for the story. Let's look at them together. The first word is __________. What word? Yes, __________. What do you think __________ means? Good."
   Repeat process for each word until the student is able to correctly read and define all of the words. Feel free to chat a bit about the story.

2. **Prediction.**
   Ask, "What do you think the story will be about?"
   If the student needs help making an appropriate predicaption, model making a prediction. (E.g., "Looking at the picture, title, and key words, I think the story will be about __________ because __________.")
   Interventionist writes the prediction.

3. **Cold Timing**
   The student reads the passage aloud for one minute while you record WRCM and errors. Do not correct mistakes.
   (words read) – (errors) = (correct words per minute)

   **please record on bottom right-hand corner of the story**

   Say, "When I say begin, start reading aloud and read across the page (point to the first word, across the line and to the next). Try to read each word. If you come to a word you don't know, I'll tell it to you. Be sure to do your best reading. Ready (pause). Begin”

4. **Graph cold timing on Read Naturally graphing sheet**
   Use a blue pen

5. **Modeling and Practice.**
   Follow intervention protocol for the selected intervention

   a. Place a copy of the intervention passage in front of student.

   b. Say, "Follow along while I read aloud, point to each word as I read it.”

   c. Read the entire passage at a comfortable rate.

   d. Say, "Your turn to read. Read across the page (demonstrate by pointing). Try to read each word. If you come to a word you don't know, I'll tell it to you. Be sure to do your best reading. Are there any questions?" (pause). "OK, begin.”
e. If the student makes an error, correct immediately using the standard error
correction procedure, “That words is ----. What word? Yes, ----.”

f. Repeat one more time (i.e., interventionist reads passage, student reads passage).

g. Say, “Now it’s your turn to read one more time.” On the final student reading,
record WRCM and errors.

6. Answer questions
Have the student independently answer questions. Then review answers together. If the
student made a mistake, say, “Let’s look at that again.” Help them find the correct
answer by referring back to the story.

7. Hot Timing
Say, “Now it’s your turn to read one more time.”
Student reads passage again for one minute as interventionist records WRCM and errors.
Do not correct errors.
(words read) - (errors) = (correct words per minute)
**please record on bottom right- hand corner of the story

8. Graph hot timing on the Read Naturally graphing sheet
Use red pen for hot timing data

9. Praise hard work!
READ NATURALLY PROTOCOL

1. **Key Words and Picture.**
   Give the students the passage for the day.
   Say, "Today we are going to read about ________. Here is a picture of _________.
   Here are some important words to know for the story. Let's look at them together. The first word is ________. What word? Yes, _________. What do you think ________ means? Good."
   Make sure each student repeats the word back to you at the same time
   Repeat process for each word until the student is able to correctly read and define all of the words.

2. **Prediction.**
   Ask, "What do you think the story will be about?"
   If the student needs help making an appropriate prediction, model making a prediction. (E.g., "Looking at the picture, title, and key words, I think the story will be about ________ because ________."
   *No need to write the prediction, just discuss*

3. **Cold Timing**
   One student reads the passage aloud for one minute while you record WRCM and errors. Do not correct mistakes.
   (words read) – (errors) = (correct words per minute)
   record on bottom right-hand corner of the story

   - As one student reads the passage, the other will complete a word search (in the same room)
   - Alternate so that the first student that completed the cold read now completes the word search, and the second student now completes their cold read
   - Say, "When I say begin, start reading aloud and read across the page (point to the first word, across the line and to the next). Try to read each word. If you come to a word you don't know, I'll tell it to you. Be sure to do your best reading. Ready (pause). Begin"

4. **Graph cold timing on Read Naturally graphing sheet for both students**
   Use a blue pen

5. **Modeling and Practice.**
   Follow intervention protocol for the selected intervention
   a. Place a copy of the intervention passage in front of both students.
   b. Say, "Follow along while I read aloud, point to each word as I read it."


c. Read the entire passage at a comfortable rate.

d. Say, “Your turn to read. Read across the page (demonstrate by pointing). Try to read each word. If you come to a word you don’t know, I’ll tell it to you. Be sure to do your best reading. Are there any questions?” (pause). “OK, begin.”
- Both students will read the passage at the exact same time

e. If one of the students makes an error, have both students correct the word at the same time immediately, using the standard error correction procedure, “That words is -----. What word? Yes, -----.”

f. Repeat one more time (i.e., interventionist reads passage, students read passage).

6. Answer questions
Have the student independently answer questions. Then review answers together. If the student made a mistake, say, “Let’s look at that again.” Help them find the correct answer by referring back to the story.

*Answer as many questions as possible within your time limit, but if you do not finish all of the questions, that is OK.

7. Hot Timing
Say, “Now it’s your turn to read one more time.” On the final student reading, record WRCM and errors
Student reads passage again for one minute as interventionist records WRCM and errors. Do not correct errors.
(words read) – (errors) = (correct words per minute)
**please record on bottom right-hand corner of the story

- As one student reads the passage, the other will complete a word search (in the same room)

- Alternate so that the first student that read now completes the word search, and the second student completes the hot timing

8. Graph hot timing on the Read Naturally graphing sheet
Use red pen for hot timing data

9. Praise hard work!
R–CBM ADMINISTRATION DIRECTIONS

Place the unnumbered copy of the R–CBM probe in front of the student. Place the Examiner’s Copy or computer/device screen in front of you, shielded from the student’s view.

Say to the student:
When I say “Begin,” start reading aloud at the top of this page. Read across the page (demonstrate by pointing across page). Try to read each word. If you come to a word you don’t know, I’ll tell it to you. Be sure to do your best reading. Are there any questions?

Answer any questions the student may have. Say:
Begin.

Start timing when the student says the first word. If the student does not say a word after 3 seconds, say the first word. Mark the word that you provided as incorrect. When the student says the next word, start timing.

As the student reads, mark any errors (words read incorrectly, skipped, or out of order).

- **Paper administration**: Draw a slash (/) through the incorrect word. Record any insertions by writing them above the line of text where the insertion was made. If the student self-corrects within 3 seconds, mark the self-correction with “SC.”

- **Computer-assisted administration**: Click/touch the incorrect word. If the student self-corrects within 3 seconds, click/touch the word again to remove the mark. If the student skips a line, click the box to the left of the line.

Do not correct errors. Mark them as incorrect and let the student continue reading. If a student stops or struggles with a word for 3 seconds, give the student the word, mark it as incorrect, and move on.

At the end of 1 minute, place a bracket ( | ) (or click/touch) after the last word the student attempted. Let the student finish reading the sentence and then say; Stop.

For universal screening, administer the second and third probes the same way, but shorten the directions. Say:
When I say “Begin,” start reading aloud at the top of this page.

You may also use these abbreviated directions in progress monitoring after the student has become familiar with the task.

In universal screening, if the student reads 10 words or less correctly on the first or second probe, do not administer the remaining probe(s).
Appendix B

Read Naturally Reading Intervention Passages
Kinkajou

Review Key Words

**benefit** Benefit means to get something good out of something.

**nectar** Nectar is the sweet juice that flowers make.

**pollinate** Pollinate means to move pollen from one flower to another so that the flowers can make seeds.

**rainforest** A rainforest is an area of dense forest near the equator where the weather is hot and wet.

Write a Prediction

---

Read the Story

It's nighttime in the rainforest. High above the ground, a small, furry animal swings from branch to branch. The animal stops and hangs from its tail in front of a big white flower shaped like a cup. It plunges its face into the middle of the flower. When the animal pops its face out again, it looks like it's wearing a powdery mask! What is this animal? What is it doing?

The animal is a kinkajou. Kinkajous have sharp claws and teeth, so they are classified as carnivores. Sometimes, they do eat insects and other small animals. But kinkajous seem to prefer eating fruit. They also like to drink flower nectar.

When kinkajous drink nectar from flowers, they act as pollinators. Pollen from a flower sticks to the kinkajou's furry face. Later, the kinkajou moves to another flower. Pollen falls from the kinkajou's face into the new flower. In this way, the kinkajou spreads pollen from flower to flower.

Kinkajous are some of the only carnivores that pollinate flowers. In doing so, kinkajous help to keep the rainforest alive and healthy. The kinkajous benefit too—nectar is a sweet treat!
Kinkajou

Answer the Questions

1. What is the main idea of this story?
   a. Nectar is a sweet treat for rainforest animals.
   b. Kinkajous help pollinate flowers in the rainforest.
   c. Kinkajous are carnivores that have sharp claws and teeth.

2. What do kinkajous seem to prefer to eat?
   a. pollen
   b. insects
   c. fruit

3. What does the word classified mean in this story?
   a. made an advertisement
   b. kept something a secret
   c. put into a certain group

4. How do kinkajous help keep the rainforest healthy?
   a. by eating small animals
   b. by pollinating flowers in the rainforest
   c. by drinking sweet nectar

5. How are kinkajous different from most carnivores?

6. Match each word with its definition.
   1. prefer   a. ___ drops suddenly
   2. carnivores b. ___ like dust
   3. powdery   c. ___ meat eaters
   4. plunges   d. ___ favor over another

Summarize the Story

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

Number Correct: _______
Number of Words Written: _______
Appendix C

Sample Student and Assessor Dependent Measure Forms
It rained all day long. The wind and rain knocked the remaining leaves to the ground where they were swept into the street. Today was a typical fall day.

Just two days ago, the sun was out and the temperatures were very pleasant. Raking leaves into large playful piles was very relaxing.

The family worked together gathering the maple leaves into piles. Kids will be kids, and they loved jumping and hiding in the leaves. Even their dog liked to romp around in the leaves. It was fun for everyone.

The next day, the weather changed slightly. Clouds began to roll into the area and darken the sky. It did not rain then, but it was clear that winter was near. The family thought that the ground would be covered in no time. Winter was approaching fast.

They awoke to the rain hitting the roof of their home. It was a light rain, so they figured it would rain all day. They were right. Now the kids would not be able to play in the leaves. The leaves were all wet and brown. They were no longer dry and colorful.

The winds picked up speed and sent the piles of leaves blowing across the yard and into the street. The kids thought they were pretty lucky to have been able to play in the leaves yesterday.

Later in the day, the street sweeper came into their neighborhood and, with its mighty vacuum, gobbled up the leaves that had found their way into the street. The leaves were gone.

That night the kids were tucked into bed for the evening. As they slept, the rain turned to snow.

The kids dreamed of sledding and snowmen. The next morning their dreams came true. Snow!
It rained all day long. The wind and rain knocked the remaining leaves to the ground where they were swept into the street. Today was a typical fall day.

Just two days ago, the sun was out and the temperatures were very pleasant. Raking leaves into large playful piles was very relaxing.

The family worked together gathering the maple leaves into piles. Kids will be kids, and they loved jumping and hiding in the leaves. Even their dog liked to romp around in the leaves. It was fun for everyone.

The next day, the weather changed slightly. Clouds began to roll into the area and darken the sky. It did not rain then, but it was clear that winter was near. The family thought that the ground would be covered in no time. Winter was approaching fast.

They awoke to the rain hitting the roof of their home. It was a light rain, so they figured it would rain all day. They were right. Now the kids would not be able to play in the leaves. The leaves were all wet and brown. They were no longer dry and colorful.

The winds picked up speed and sent the piles of leaves blowing across the yard and into the street. The kids thought they were pretty lucky to have been able to play in the leaves yesterday.

Later in the day, the street sweeper came into their neighborhood and, with its mighty vacuum, gobbled up the leaves that had found their way into the street. The leaves were gone.

That night the kids were tucked into bed for the evening. As they slept, the rain turned to snow.

The kids dreamed of sledding and snowmen. The next morning their dreams came true. Snow!