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The Effects of Reading Fluency
in the Elementary Montessori Classroom
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The Effects of Reading Fluency in the Elementary Montessori Classroom

Submitted on May 22, 2016 in fulfillment of final requirements for the MAED degree

St. Catherine University

St. Paul, Minnesota

Advisor	Date

READING FLUENCY IN ELEMENTARY

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Abstract

The purpose of this research was to identify ways of improving reading fluency for elementary children in grades first through sixth. Children scoring below the 40th percentile on reading standardized test scores, determined our testing population. Four data collections tools were used, including a child-centered survey, a reading fluency rubric, teacher observations, and fluency graphs. The Read Naturally Program was used as the reading fluency intervention. Students made fluency progress in both the upper and lower elementary levels. This research highlights the importance of reading fluency interventions. Further research might focus on self reflection for children using the iPad Read Naturally Program.

What are the characteristics of a nation that make it great? Education is one of the most critical aspects of identifying nations as great. What aspects of education are essential for countries to master? It is assumed that reading would be found at the top of this list. 93 million adults in the U.S. read at or below the basic level needed to contribute successfully to society. When looking specifically at fourth grade, 65 percent read at or below grade level. A solid foundation in reading during the first three years of schooling are a critical time to learn the basic skills needed to tackle a more advanced reading curriculum, so older children will not have a struggle with reading then or later as adults (Reading is Fundamental, 2003).

There is a critical difference between reading words on a page and reading with fluency. A child reading individual words does not mean they can read fluently. Not being able to read fluently creates a problem because fluency is the ability to read with speed, accuracy, and proper expression. Children also need to understand what they read. When reading aloud, fluent readers read in phrases and add intonation appropriately. Their reading is smooth and has expression. Fluency motivates a child to continue to read. If a child's reading is slow or labored, they will have trouble meeting the reading demands of their grade level (Reading Rockets, 2015). When looking at our student population and classroom demographics, reviewing our NWEA MAP test data, obtaining our tools needed, and researching the Read Naturally program, we decided to test reading fluency in our classrooms.

When looking at our student population in first through sixth grade, we began to see the same problem. Children could read words, but children could not read the words fluently when asked to read aloud during presentations. One assessment tool used to help assess our students was the Northwest Evaluation Association (NWEA) reading test. In September, the children conducted the NWEA exam. The assessment tool, Measures of Academic Progress® (MAP®),

creates a personalized assessment experience by adapting to each student's learning level. The assessment data gives information about what each student knows and what they are ready to learn (NWEA, 2016). The assessment showed each child's average score based on the 50th percentile (average). Children below the 40 percentile need an intervention in place for reading. It started the conversation of what interventions would ensure success and would help address the child's reading skill struggles.

For the NWEA exam, the 50th percentile is the indicator of an average performing student. Anything below the 50th percentile would be considered performing below average. The population chosen for this research, were students that fell below the 40th percentile. The population came from two different classrooms, a lower (first, second, and third graders) and an upper (fourth, fifth, and sixth graders) elementary classroom. We ended up with three first graders, five second graders, two third graders, one fourth grader, five fifth graders, and four sixth graders.

Once the students were identified for the study, a reading fluency intervention needed to be identified. The Read Naturally program has helped create the interventions and tools used in conduct this study. With the Read Naturally program, a child reads a predetermined reading passage multiple times throughout the week. Children practice these passages in multiple ways; they are practiced by reading with an adult, reading the passage out loud to themselves, and listening to a fluent reader reading the same passage. By practicing the reading passages multiple times, the process helps the child work on all aspects of fluency.

After deciding on the Read Naturally Program, tools for measurement needed to be identified. First, the children documented how the children felt about their reading fluency. The children would use a self-assessment with pictures to depict how they felt about reading. Next, a

fluency rubric would need to be developed. This rubric would be used for all of the students in the initial assessment and again at the end of the test period. Finally, a fluency tracker would need to be created to see the progress of each child's reading fluency for the duration of the test.

Through eight weeks of interventions with the Read Naturally Program, the hope is that children will increase their fluency skills as well as their perception of how they perceive their fluency skills. Through indicating the problem, obtaining the tools needed for the intervention, and researching the Read Naturally program, our test was established and ready to be tested in both the upper and lower elementary classrooms.

Description of the Research Process

Bashir and Hook state the definition of reading fluency in the journal article, "Fluency: A Key Link Between Word Identification And Comprehension," as, "The ability to read connected text rapidly, smoothly, effortlessly, and automatically with little conscious attention to the mechanics of reading, such as decoding," (Bashir & Hook, n.d, para. 16). The development of reading fluency is critical to the development of reading skills in children. Children who are fluent in reading no longer have to focus on decoding the words in the text. When children are fluent readers, they connect the text and comprehend what they are reading (Bashir& Hook, n.d.). For students that are not passing the reading portion of the NWEA MAP exam, the question remains: is this is due to lack of reading fluency? Will using an intervention method to enhance reading fluency activities for elementary students increase their reading skills thus improving their performance on the reading portion of the NWEA MAP assessment?

Is reading fluency a critical aspect of reading skills? Authors Hudson, Lane, and Pullen state that, "Reading fluency characterizes good readers," (Hudson, Lane, & Pullen, n.d., para. 1). More and more schools have incorporated reading interventions to improve students' reading abilities and performance on standardized tests. According to Alley, "When students are not strong readers, they often fail to perform proficiently in all content areas of standardized tests," (Alley, 2011, p.4). According to the National Reading Panel (NPR) (2000), reading fluency directly correlates to reading comprehension, vocabulary, prosody, decoding text, reading speed and accuracy, and the students' overall enjoyment and confidence in reading. When a child can read fluently, it takes their reading from the beginning level of learning how to read to proficient reading (Dudley & Mather, 2005).

In the study, "Evaluating the Efficacy of Reading Fluency Instruction," Harris (2010) found the importance of reading fluency and fluency interventions. In 2000, the National Reading Panel identified five essential components of a strong reading curriculum: phonemic awareness, phonics, fluency, vocabulary development, and comprehension (Cockerille, 2014). According to the National Reading Panel (2000) fluency is defined by "accurate reading at a minimal rate with appropriate prosodic features (expression and deep understanding)." When looking at "minimal rate," the rate is fast enough that you do not forget what you read in your working memory (Tolles, 2015, slide 4).

Research by National Reading Panel (2000) and other authors (Rasinski, 2013; Palmer 2010; Malouf, Reisner, Gadke, Wimbish, & Frankel, 2014; Hudson, Lane, & Pullen, 2014) state that students' oral reading fluency and comprehension are connected, their success being closely aligned. Comprehension involves having the ability to understand the meaning of the material that is being read. Fluency is necessary for this skill because a student can concentrate on the meaning of the material once they can read accurately. According to Rasinski (2004), reading requires readers to process the text (the surface level of reading) and comprehend the text (the deeper meaning). Reading fluency refers to the ability to develop control over surface-level text processing, which enables students to focus on understanding the deeper levels of meaning embedded in the text (Malouf, Reisener, Gadke, Wimbish, & Frankel, 2014; Palmer, 2010; Rasinski, 2004; Hudson, R, Lane, & Pullen, n.d. 2014).

According to the authors, Kuhn, Rasinski and Zimmerman (2014), and Malouf, Reisner, Gadke, Wimbish, and Frankel (2014), there is a strong correlation between reading fluency and vocabulary, prosody, decoding text, reading speed and accuracy. When an individual has problems reading, whether they read slowly, misunderstand the words or read words incorrectly,

the meaning of the text is unclear to them. Reading fluency results in the understanding of the vocabulary in context. It also strengthens reading prosody, the ability to decode words not immediately understood (decoding text), and the skill to read the text faster and more accurately (Palmer, 2010; Hosp & Suchey, 2014; Hudson, Lane, & Pullen, n.d.; Smith, Cummings, Nese, Alonzo, Fien, & Baker, 2014).

The authors Hudson, Lane, & Pullen showed that there is a very strong correlation between children that can read fluently and their desire, confidence, and willingness to read.

Children that can read fluently, comprehend, and understand the vocabulary written, will read more than children that do not read as fluently. A stronger confidence in reading links directly to a child's desire and willingness to read (Hudson, Lane, & Pullen, n.d.).

In the article, "Creating Fluent Readers," Rasinski (2004), defines reading fluency, addresses the cognitive research on the importance of fluency, and describes how to assess fluency focusing on accuracy and meaning and not on speed (see Appendix G). Rasinski links two methods of instruction that have been proven by the National Reading Panel (2000) to increase fluency: assisted readings and repeated readings.

Children learn from direct instruction and through teacher modeling of specific reading strategies, as these are important aspects of effective reading instruction. It is not enough to ask a child to read a passage over and over again. One has to lay out specific steps that they may take to increase their level of fluency (Cockerille, 2014). In addition, for maximum engagement literature needs to be connected to the real world and to components of the children's daily lives.

The National Reading Panel (2000) report on fluency looked at the changes in the concept of fluency, the effectiveness of the two major instructional approaches to fluency development, and how they may be approached in schools. The National Reading Panel analyzed

the approach of repeated oral reading practice or guided repeated oral reading practice. The second approach studied the effect of an increase in the amount of independent or recreational reading children engaged in. Researchers have not reached an agreement on what form of practice is most effective. Both Rasinski and NRP agree multiple strategies increase fluency among children K-12.

The *Read Naturally* program is a method used to strengthen reading fluency. "The Read Naturally Programs develop reading fluency, supports vocabulary development and promotes reading comprehension using research-based strategies of teacher modeling, repeated reading, and progress monitoring" (Read Naturally, n.d.). The What Works Clearinghouse conducted an effectiveness test on Read Naturally and posted the results on the US Department of Education website. The results from this test showed that in the areas of general reading and reading fluency student's scores greatly improved when Read Naturally was used as a strategy for fluency development. The other two categories that were tested (alphabet knowledge and comprehension) showed that the children had either marginal improvement or no improvement (Read Naturally Intervention Report, n.d.).

According to Rasinski (2010), there are several instructional methods to develop fluency. The main methods are modeling fluency reading and assisted reading. Rasinski's research has shown that when students read a text several times with feedback, they not only improve their performance on the practiced text, they also improve on new texts, which may be more challenging than the original text. According to Rasinski, to make repeated reading authentic and purposeful activities for students is to make it a performance activity. If students know they will perform or read orally, they will have an authentic purpose for their practice. Rasinski's

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research into repeated reading has shown that readers improve in their word recognition, reading rate, prosody, comprehension, and motivation for reading (Rasinski, 2013).

The Read Naturally Program was implemented because it addressed they key components of reading fluency according to Rasinski. The Read Naturally program has the student read the passage multiple times with feedback, it shows the student their improvement, teaches critical vocabulary, and encourages the student to read with all the correct components of reading fluency. The Read Naturally Program was tested and we concluded through the results that it is an effective method for reading fluency (Read Naturally Intervention Report, n.d.).

Taking on an action research project is a massive undertaking, and many things needed to be considered. First, we chose which time of year to conduct the research. Next, we decided on four data collection strategies which included a student survey, a teacher led rubric about how the child reads aloud, a method to observe reading in the classroom, and a graphing system for both the lead teachers and children to track progress and make goals. Finally, we researched and found a reading intervention program that we could incorporate into our classrooms that focused on fluency. We decided to conduct the reading intervention for eight weeks in two classrooms. One was a lower elementary classroom that consisted of children ranging in age from 6-9 and an upper elementary classroom that consisted of children ranging from ages of 9-13. Finally, we decided that the process of the reading intervention may need to look slightly different for the lower elementary than for upper elementary students. The upper elementary students used an iPad version and the lower elementary students used a paper format. This difference was due to the stronger amount of independence in the older children and their higher reading abilities. The iPad version did not have low enough remedial reading material for the lower elementary children.

We knew that the timing for conducting an eight-week research investigation would be critical. We wanted to ensure that we scheduled our research around extended breaks and required state standardized testing. We came to the conclusion that the best time to conduct our action research would be in the middle of January. This would ensure that the research happened between winter and spring breaks and avoided the months in which our student populations participate in state standardized exams. Our research was set to begin in the second week of January, be conducted for eight weeks, and end in the middle of March.

In addition to determining the time of year our intervention needed to take place, we also needed to decide on ways that we would collect the data. We determined that there would need to be four critical pieces of data collection for our research. The first piece of data was a child centered self evaluation given to each student individually to determine how they felt about their own reading when they read aloud. These surveys were found from an internet resource called mshouser.com (see Appendix A). These surveys were read aloud to the children by an adult. The surveys contained four questions that asked the children how they felt about their phrasing when they read aloud, the rate or speed in which they read, if they interpret punctuation when they read aloud, and if they use expression in their reading when they read aloud. The survey answers had images of children's faces that corresponded to a Likert-type scale, a scale that is used to measure attitudes or opinions, to help the children determine which answer to select. The children could select from a scale of 1 to 4, 1 representing that they did not feel they could perform that skill well and 4 meaning they felt that when they read aloud those skills were consistently present.

The second method that was used for data collection was a reading fluency rubric for both lead teachers to fill out about each child individually as the child reads a passage aloud (see Appendix B). This rubric was made by Timothy Rasinski and located on his website, www.timrasinski.com/?page=presentations. Each child had an individualized reading selection. The child was asked to read a specific reading aloud and the lead teacher rated the specific aspects of fluency based on how the child read the specific piece. The rubric specifically addressed aspects of reading fluency such as rate, correct pronunciation of words, intonation of the voice (monotone reading), and if the child paid attention to punctuation as they read. Completion of the rubric for all of the children occurred during the first week of interventions.

In addition to the children's self survey and reading teacher rubric, the we decided that observation of reading happening in the classroom was critical. Throughout the eight weeks of the intervention, two daily observations were made, one in the morning and another in the afternoon (see Appendix C). The purpose of these observations was to determine how often children were choosing to read during their work time. We also wanted to observe the children and see if they were choosing to read more due to an increase in reading fluency. When observing the children, we were specifically looking for books, nomenclature, magazines, reading apps on the Pad, Waseca (reading picture boxes; see Appendix D), and dictionaries. We decided to record the information by creating a tally system. We would mark a tally for each child that we saw doing a reading related work during the observation. We kept each individual observation separate as to ensure clear data collection. We developed an observation log that we used for the observation data collection.

In addition to the data sources that needed to be collected, we also needed to determine which reading intervention would be used for the study. We asked many colleagues at our school for advice about which programs or interventions could be used to help strengthen reading fluency in the classroom. One colleague suggested that we look into using the Read

Naturally Program. This program has both book and CD versions, and an app for the iPad. Even though the tools that the children use are different, the process for the Read Naturally program is the same. The lower elementary students used the book version and the upper elementary students used the iPad version. However, both classes would follow the same method and process that Read Naturally has to offer.

The first step in the Read Naturally program allows for the child to read a story at their level for one minute. The child reading the story can have a student partner or an adult mark down words they read incorrectly. When the minute is up, they total- all the words they read correctly (the iPad version automatically totals). However, the adult or the teacher deducted the amount of words read wrong from the score. The child graphs the score they obtained from the first reading. After the cold read, the child proceeds by practicing the same reading with an expert reader (an adult or the iPad). The Read Naturally Program suggests that the child reads the passage at least three times aloud with the expert reader. Finally, after the child has practiced, they read the story aloud again for a final read. Again the child is timed for one minute and a score is determined in the same fashion as the cold read. Read Naturally also includes reading comprehension questions for the end of the hot read as well. The last step is that the child record their cold read and hot read scores (www.readnaturally.com).

The final form of data that we used in our research was a fluency graph (see Appendix E). This fluency graph was found on the website mshouser.com. This fluency graph was designed to track the children's progress from their first reading of a passage to the last reading. We made each child their own fluency graph to indicate scores from the Read Naturally intervention program. The children's graphs would depict two scores in the form of bar graphs from each week. The first bar on the graph would indicate the score the individual child received

from their initial read (cold read) of the story. The second bar on the graph would indicate the child's score for the final reading (hot reading) of the story. On the same graph, there was a line for the child to make a personal fluency goal for the duration of the eight week timeline. These goals were made by the children at the beginning of the intervention. Each child worked towards their goal from the start of the intervention to the end. In addition, the children graphed their scores and participated in conversations with their teacher about their scores while looking at the graph.

Finally, it was determined that two pieces of our data collection would be used again at the end of the duration to conclude if there was an increase in progress. We decided that we would administer the child friendly self evaluation form and the teacher rubric a second time. In both situations these data formats would be administered the exact same way as they had been administered the first time. The information would show us the growth that was made in the students by comparing their answers from the first week to the last week- or comparing their fluency from the first week to the last week.

For our action research project we needed to determine when we would implement our intervention and begin our research, we found the data collection tools that we would need, and decided to use the Read Naturally Program as our reading intervention. Once all of these steps were decided, we were ready to undergo our action research. We knew that the data collection tools would help us determine the level of success of our intervention. We felt confident in the data collection tools and reading program that we chose to help us gather and interpret this valuable information.

Analysis of Data

For the action research project conducted in both the lower and upper elementary classrooms, four distinct pieces of data were collected. The data included a child-centered survey about how the children felt when they read aloud, a teacher completed rubric assessing fluency, teacher observations regarding the use of reading materials in the classroom during work periods, and fluency graphs that represent the progress individual children made between the first (cold) and final (hot) readings. It is through these four data collections that we found our students making fluency progress in both the upper and lower elementary levels.

The first piece of data collected was the child survey found from an internet resource called mshouser.com (see Appendix A). These surveys were read aloud to the children the first week of the research. The surveys state the following four statements: Punctuation: I can read fluently. I use the punctuation to help me know how to read the story so that it sounds right and makes sense; Expression: I can read fluently. I read with expression so that it sounds interesting and makes sense; Phrasing: I can read with fluency. I put my words together, so my reading sounds right and makes sense. I am paying attention to my phrasing; Rate: I can read with fluency. I read at the correct rate. Not too quickly, and not too slowly. My reading sounds right and makes sense (Houser, 2016).

The number one represented that it was a difficult skill for the child, two represented that the child was able to do that reading fluency skill sometimes, three represented that the child was usually able to do that reading fluency skill, and four represented that they always can do that skill. In addition to the numbers, the answers had particular words, examples, and pictures to go along with it.

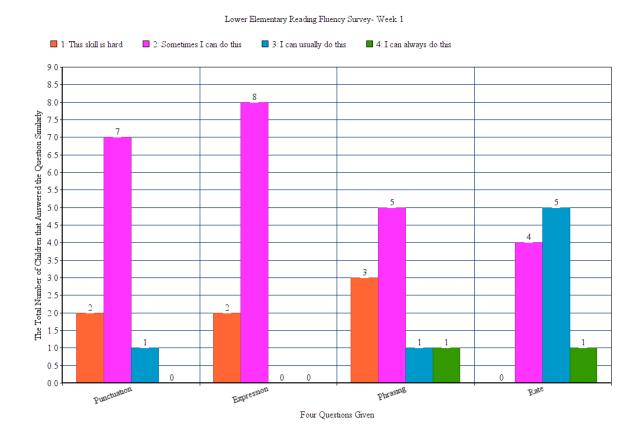


Figure 1 Lower Elementary Reading Fluency Survey Week 1.

This figure illustrates the challenges lower elementary children viewed their fluency skills the first week of interventions.

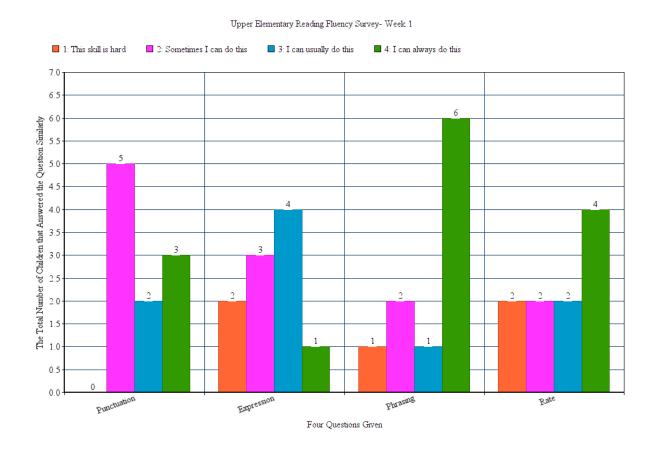


Figure 2 Upper Elementary Reading Fluency Survey Week 1.

This figure illustrates the challenges upper elementary children viewed their fluency skills the first week of interventions.

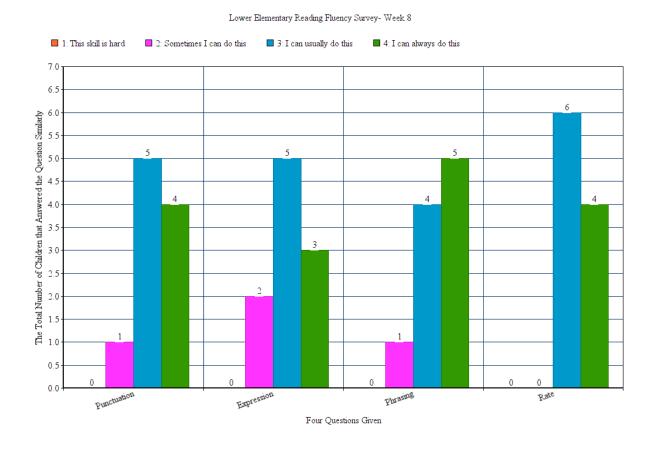


Figure 3. Lower Elementary Reading Fluency Survey Week 8.

This figure shows the results of the reading fluency survey given to the lower elementary children at the end of the eight-week research period.

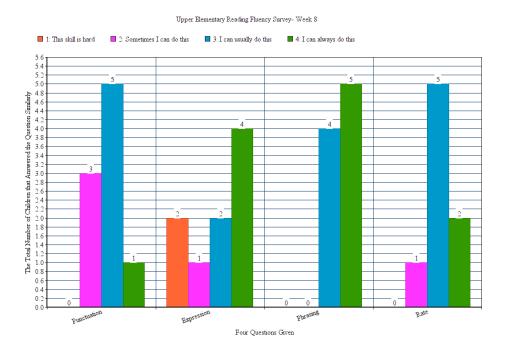


Figure 4 Upper Elementary Reading Fluency Survey Week 8.

This graph displays the results of the reading fluency survey given to the upper elementary children at the end of the research period of eight weeks.

From these graphs, we can conclude that overall the children felt that their reading fluency skills improved over the course of the eight-week trial. The first week the average score of two was given for the sections of punctuation, expression and phrasing. Week eight shows the average rating for punctuation and expression went up to a three and phrasing went to a four. On lower elementary fluency graph for week eight, all children rated themselves as a two or higher. No one felt their four fluency skills were a one (the skill is hard).

In the upper elementary classroom, we can see that by looking at the first upper elementary graph that the children had a couple of skills they felt they did well overall, but there were some lower scores on all skills. At the end of the eight-week duration, the children

assessed themselves significantly higher across the board. The blue and green bars depict the increase of higher scores. Also, there are fewer orange and pink bars that represent the lower numbers on the fluency survey that the children filled out. We can conclude that the children felt more confident in their abilities to read aloud from the increases in scores from both the lower and upper elementary classrooms.

The next piece of data that was collected and used in the action research project was reading fluency rubrics (see Appendix B). The rubrics were used together with individual reading passages at each child's level. The teacher administering the reading assessment would ask the child to read a leveled passage aloud and the teacher would rate them on the rubric.

The rubric contained the following criteria in the following four reading fluency areas:

Expression and Volume, Phrasing, Smoothness, and Pace. The rubric had a scale of one to four, with one meaning a fluency technique that was rarely present, a two meaning it was sometimes present, and three meaning that it was usually present, and four meaning that it was always present. At the end of the eight-week testing session, the teacher had the child read the same passage and graded them again on the same rubric.

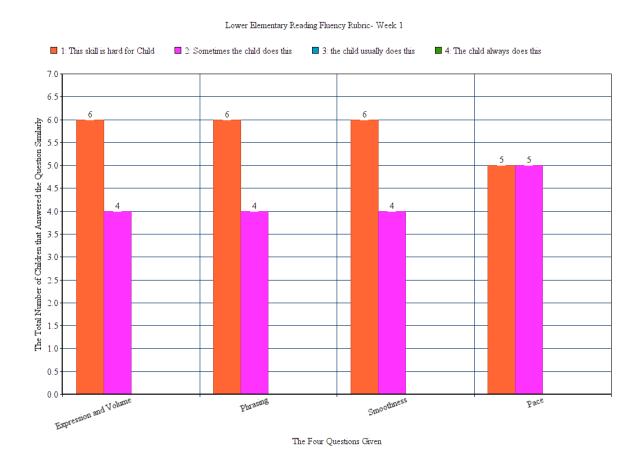


Figure 5 Lower Elementary Reading Fluency Rubric Week 1.

The graph shows the data collected for the lower elementary students from the teacher administered rubrics during the first week of the research. You can see from the data that none of the students given the fluency rubric were rated a three or four on any of the four categories.

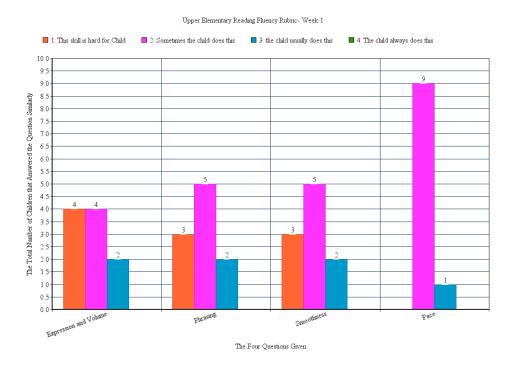


Figure 6 Upper Elementary Reading Fluency Rubric Week 1.

This figure displays the data collected for the upper elementary students from the teacher administered rubrics during the first week of the research. In the Upper Elementary we can see similar results to the lower elementary children. However, in the upper elementary, we do have some threes assessed to some of the children.

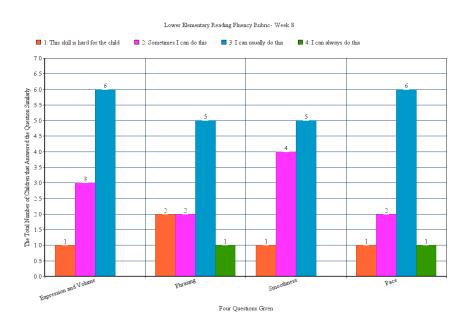


Figure 7 Lower Elementary Reading Fluency Rubric Week 8.

This graph displays the data for the lower elementary students from the rubrics in the final week of our research. You can see a difference in the scores from the first to the last week. Now, in the eighth week, children were scored with threes and fours. These were not indicated on the first week.

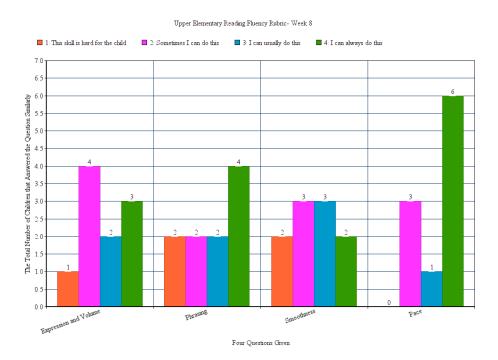


Figure 8 Upper Elementary Reading Fluency Rubric Week 8.

This figure shows the data for the upper elementary students from the rubrics in the final week of the research. Like the lower elementary, there was a large increase in the scores in week eight. In the eighth week the upper elementary children scored more threes and fours that had not existed in the first week.

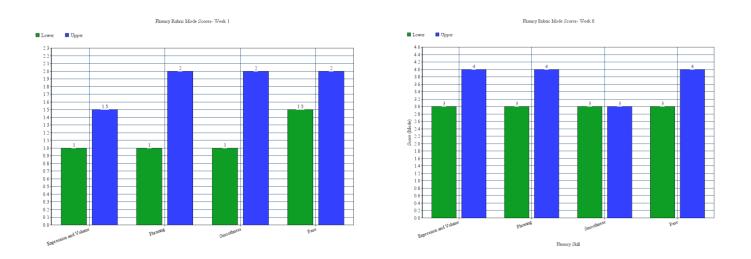


Figure 9 and figure 10 (left and right). Fluency Reading Mode Scores Week 1 and Fluency Reading Mode Scores Week 8.

The graphs represent the mode for the teacher rubrics in both the lower and upper elementary children. Figure 9, to the left, contain the mode data from the first week of the research and the figure 10, to the right, contains the mode data from the last week of the research.

The graphs illustrate that reading fluency improved in both classrooms over the eightweek period. In lower elementary the children asked to read. The children took ownership of practicing the words that were difficult. After practicing their reading passage, they would report the difficulties (omitting of words) and achievements (reading with expression) they encountered. The self-awareness of their fluency skills increased from week one to week eight. Figure 1 shows the average score for expression and volume, phrasing, smoothness, and pace was a one. By week eight the average score was a three for the four fluency skills.

In upper elementary the children were eager to read a story that was familiar. Overall they tended to feel confident, read with expression, and had a pacing that was neither too fast nor too slow. They often made comments like, "I remember this story" or "Didn't we already read this one?" which showed that they remembered it after eight weeks. We can conclude from the teacher rubric given at week eight that the children read their passages fluently.

The third piece of data collected was teacher observations. Throughout the intervention, two daily observations were made, one in the morning and another in the afternoon. When observing the children, we were specifically looking for books, nomenclature, magazines, reading apps on the iPad, Waseca (reading picture boxes; see Appendix D), and dictionaries to see if children were using these reading materials. We decided to record the information by creating a tally system. We would mark a tally for each child that we saw doing a reading related work during the observation.

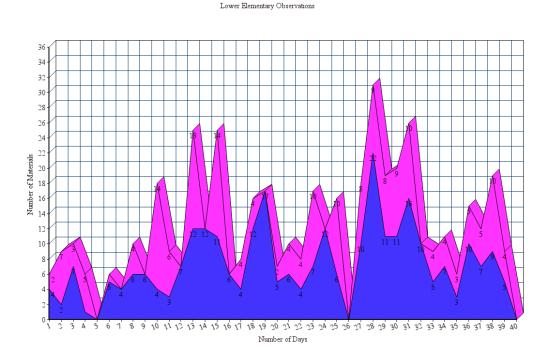


Figure 11. Lower Elementary Observations.

The graph displays the data for the observations made in the lower elementary classroom (see Appendix C). The observations were used to see if children were choosing to read at work time. The blue represents the morning work period and purple represents the afternoon work period.

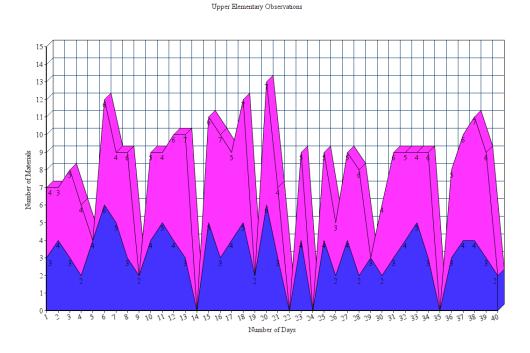


Figure 12. Upper Elementary Observations.

This figure shows the data for the observations made in the upper elementary classroom.

The observations were used to see if children were choosing to read at work time. The blue represents the morning work period and purple represents the afternoon work period.

The median for reading materials used in lower elementary was eight, nine and the median for upper elementary was four. Even with the difference in numbers, there was evidence that reading was taking place during each level's three-hour work period as well as the shorter work period.

From the data collected, we found a few interesting things emerge. First, the lower elementary students tended to work on reading more in the classroom than the upper elementary

children. One hypothesis of why this would occur would be due to the large focus on learning to read in the lower elementary verses refining this skill in upper.

Another point discovered was that upper elementary read more in the afternoon.

However, the upper elementary has their three- hour work cycle in the afternoon, and lower elementary has their three-hour work cycle in the morning. Regardless, there was an increase of reading; both lead teachers found the Read Naturally program fostered the encouragement to continue to work on their reading passages during their work time. In the upper elementary, the children choose to repeat the lessons more often.

The reasons for times with no observation include the following in the lower elementary: two snow days, a substitute teacher, Physical Education times, a Valentine's party, two field trips, and three days of forgotten observation. Upper elementary also had: a substitute teacher, many Physical Education sessions, and homework collaboration times. What was apparent at both levels was that children were choosing to read.

The final data collected was fluency data represented on a graph for each child (see Appendix E). The location of the fluency graph is on the website mshouser.com. This fluency chart was designed to track the children's progress from their first reading passage to the last.

		Cold Reading		Hot Reading		Individual Student Goal		al
Lower Elementary								
Fluency	Week 1	Week2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
Child A	34 64 44	26 60 44	29 50 44	33 53 44	19 59 44	53 53 44	21 47 44	45 82 44
Child B	20 26 30	24 56 30	29 59 30	33 66 30	39 79 30	48 74 30	43 88 30	41 69 30
Child C	10 44 25	15 49 25	14 47 25	31 35 25	20 57 25	46 62 25	18 46 25	36 97 25
Child D	50 88 70	71 86 70	55 91 70	58 91 70	64 101 70	70 84 70	68 109 70	77 120 70
Child E	23 28 33	27 65 33	28 49 33	19 56 33	21 54 33	30 61 33	27 60 33	8 41 33
Child F	34 55 45	37 79 45	37 96 45	38 71 45	19 88 45	49 79 45	18 52 45	27 92 45
Child G	1 10 5	4 6 5	3 13 5	3 8 5	2 4 5	2 4 5	3 3 5	2 5 5
Child H	18 39 28	36 64 28	25 51 28	14 68 28	17 59 28	24 52 28	37 66 28	7 44 28
Child I	29 38 35	31 42 35	32 50 35	15 68 35	21 55 35	24 51 35	38 66 35	8 41 35
Child J	10 12 15	8 19 15	4 12 15	4 20 15	4 26 15	11 15 15	11 35 15	4 11 15

Figure 13. Lower Elementary Fluency Graph Scores.

The table shows the data for lower elementary's initial reading (cold-blue color) final (hot-red color) for ten children during the eight-weeks. In addition to the hot and cold reading, the table also shows the individual fluency goal for each child in green.

We have inserted this table with all of the individual scores to emphasize a couple of points. First, the blue numbers represent the individual child's cold reading scores. Second, the red numbers show the child's hot reading scores. Finally, the green numbers show the child's reading fluency goal of how many words they would read in one minute. A child's reading fluency goal was set from the first cold reading score and then adding ten to the score. The Read Naturally Program provided guidance on how to set the fluency goal for each child. These table clearly shows the individual children's goals, the improvement made from cold reading to hot reading, and the progress made over the course of the eight-week research.

From the data collected, lower elementary met their fluency reading goal 91% of the time. Looking at the hot reading scores from the first week to the seventh week, children

increased their words per minute by 17 words. The children practiced their reading passage at school every day to work on their fluency skills. Their cold reading scores had fluctuations from increasing to decreasing words read per minute each week. Looking at their cold reading scores on Monday, there is a significant decrease from the hot reading from the previous week to the cold reading. We can conclude that children regress from not continuing their reading over the weekend, due to the regression on Friday to Monday. Some children are affected by lapses in academic instructions. The children may not be able to store concepts in their long-term memory that can easily be recalled. The amount of instruction time they need to recover their abilities may be longer than other children and may need additional instruction to regain their academics (Logsdon, 2016).

	Cold Reading			Hot Reading		Individual Student Goal		
Upper								
Elementary								
Fluency	Week 1	Week2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
Child 1	132 143 153	208 153 153	161 209 153	183 200 153	202 238 153	147 155 153	182 205 153	216 217 153
Child 2	29 44 65	37 70 65	33 63 65	20 78 65	38 58 65	27 78 65	37 70 65	32 71 65
Child 3	103 294 225	232 240 225	232 240 225	2 39 2 44 225	296 298 225	248 249 225	240 296 225	260 298 225
Child 4	108 150 160	121 146 160	94 121 160	132 159 160	132 160 160	155 170 160	120 120 160	132 159 160
Child 5	178 265 250	200 261 250	237 262 250	230 235 250	186 234 250	198 216 250	196 218 250	227 210 250
Child 6	94 141 200	129 165 200	91 214 200	121 200 200	125 243 200	91 214 200	150 271 200	113 213 200
Child 7	81 99 125	97 146 125	101 127 125	108 150 125	86 110 125	99 138 125	118 125 125	108 109 125
Child 8	90 160 150	107 167 150	75 131 150	86 141 150	76 140 150	138 185 150	82 151 150	92 159 150
Child 9	27 32 40	33 51 40	31 26 40	33 51 40	30 40 40	35 47 40	23 37 40	30 40 40
Child 10	80 154 150	11 180 150	144 182 150	93 140 150	128 151 150	103 143 150	134 159 150	154 156 150

Figure 14. Upper Elementary Fluency Graph Scores.

Above is the data for upper elementary's cold and hot reading for ten children during the eight weeks. The table has the same color coding as the lower elementary table.

The table from upper elementary shows that every upper elementary child reached their goal at some point during the research. The upper elementary students had higher scores (on average) than the lower elementary students. The difference would be expected, as the children have had more years to practice these skills. Like the lower elementary children, the upper elementary children rarely had a higher score during the first unfamiliar reading as opposed to the final familiar reading.

The upper elementary children used a different system than the lower elementary. The lower elementary students spaced the Read Naturally work over the week; cold reading on Monday, practice reading with another child on Tuesday, etc. The upper elementary children did all of the work in one session. They used an iPad that allowed for individual guided work. The upper elementary scores show that the children were able to make gains on their hot reading scores and even made gains on their cold reading scores for the duration of the research.

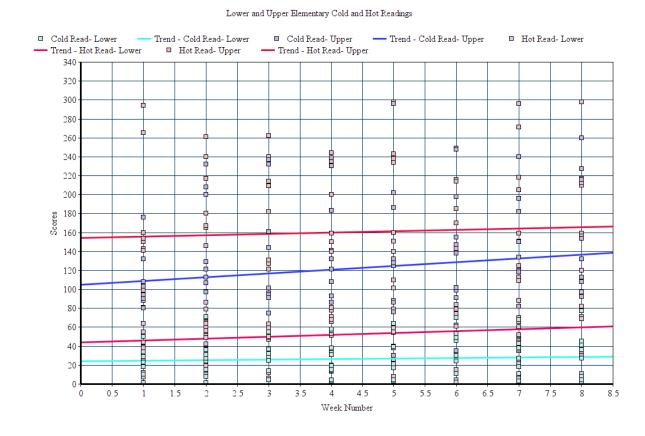


Figure 15. Lower and Upper Elementary Cold and Hot Reading.

The graph compares lower and upper elementary's cold and hot reading scores for the entire length of the eight-week research period. Also, the graph shows all of the individual scores (represented by the dots) and tendency lines. These lines show where the most frequent numbers occur for the cold and hot reading scores. The red colored lines are the hot reading scores for both classes. The blue lines are the cold reading scores for both classes.

The data above shows all of the individual scores as points on the graphs. The lines indicates the trends for the upper and lower elementary hot and cold readings. The chart indicate that the hot readings are above the cold readings for both upper and lower elementary. The lower elementary hot readings are about 20 words per minute higher than their cold reading the entire duration of the research. The upper elementary began the study with a difference of almost 50 words per minute between the cold and hot readings but ended the research with closer to 20 words per minute. The frequency lines show the cold reading lines are going up, which indicate that the children began to increase their cold reading scores as the research progressed. Repeated reading helps a child learn to recognize words, master other words, and increase their fluency. Children will be able to transfer knowledge of the words learned (Read Naturally, p. 3). All four of these lines show that the children made progress over the eight weeks in their reading fluency.

In conclusion, we found that the children made fluency progress in both the upper and lower elementary levels during the eight-week duration of the study. In the surveys, we saw an increase in scores. In the teacher guided rubrics we saw that children increased their fluency skills. In the classroom observations, the teachers found that the children were choosing to read and work on reading throughout the eight-weeks of interventions. In the fluency graphs, we found that both lower and upper elementary children met their individual goals, improved their cold reading scores with higher hot reading scores after practice, and increased cold reading scores from the beginning of the study to the end.

Action Plan

After conducting research for eight weeks, some changes, improvements, and additions could be considered for this project. After the completion of the project, the following questions were thought about and analyzed. First, what does all of the data mean? Second, how will the results of the research change our practice in our classrooms? Third, what possible impacts will this research project have on student learning for the future? Finally, how did this research project contribute to potential future action research investigations?

What does all of this mean? First, the data that we collected and analyzed showed clear patterns of reading fluency progression for children in both classrooms. The children regularly improved their initial score (cold reading) with a higher final reading (hot reading) score. The intervention indicated success for all children. Also, we saw a trend for many students that even initial cold reading scores improved over the course of the study. We can conclude that this is another indication of the program's success with reading fluency.

From the data that we analyzed from our eight weeks of research, we can conclude that the results will change the way that we teach reading instruction. First, since the intervention was successful in both of our classrooms, it is highly likely that we will both use the Read Naturally system in the future. Second, the children showed excitement in seeing their improvement on their individual fluency graphs. If we were to continue the Read Naturally Program for the duration of the school year, the children would see their progress from the beginning of the year to the end of the year. The results could be even more dramatic than what we found in the eight weeks of the research. Finally, since we found success with this program for our struggling readers, we are considering having all of our students use the system in the future. Even students that are not struggling could still benefit from practicing reading fluency.

One possible impact reading fluency has on each child's learning is an increase in their NWEA MAP Reading scores administered in May. This test was a standardized exam given to our entire school before the study. We used these scores to determine our population of children that we were going to select for the research. We used the September 2015 reading score from this test. We selected students that scored in the 40% percentile or below for their overall reading score. Since the research only lasted eight weeks, we were not able to compare the selected student's fall MAP scores to their spring MAP scores. We hypothesize that the increase in fluency would also increase the overall reading score, but we did not have that data to determine those results. The NWEA MAP Reading test will be given in May.

Another impact of overall reading fluency would be the improvement of reading comprehension. Typically children that have high fluency rates read more and remember more of what they read because they can expend less cognitive energy on decoding individual words and integrating new information from texts into their knowledge banks (K12 Reader, 2015). Also, the Read Naturally Program - focuses on reading comprehension by giving the children a small comprehension quiz at the end of each lesson. These two elements would - benefit the children's overall reading comprehension in conjunction with reading fluency.

Future action research could involve investigating how weekends, short breaks, and summer break affect the child's reading fluency since children typically are in our classrooms for three years. When conducting the eight weeks of intervention we noticed in lower elementary there was an inconsistency with the initial cold readings. One change could be giving the initial cold reading on a Friday and have the child practice the reading passage over the weekend and throughout the week; Monday through Thursday. On Thursday of the following week, the child

completes their final reading. This elimination of the break could contribute to higher levels of recall and help aid higher scores for final (hot) readings.

Future action research investigation for upper elementary would be self-evaluation of the children's fluency reading each week (see Appendix A). When conducting the study in the upper elementary classroom, the older children were very highly motivated by their scores. They were so motivated that they focused on reading fast and trying to simply get as many words out as they could in a short amount of time. One tool that had to be made was a quick self-evaluation for the children. The self-evaluation was not collected, measured, or analyzed. This tool was simply a way for the children to ask themselves a few questions to remember the point of the reading. These questions were the following: Did you read too fast or too slow?; Did you pause or stop when you got to a period or question mark?; Did you read with intonation (does your pitch change)?; The self-evaluation tool helped the upper elementary children to slow down and focus on the point of reading fluency. For the future, it would be fascinating to gather those answers for that self-evaluation and see the results combined. Example is located in the Appendix G.

In conclusion, we found that by using the Read Naturally Program we had reading fluency success in our classrooms. The improvement of scores will likely lead to the continuation of the Read Naturally Program in both classrooms for future years. Also, the Read Naturally Program will most likely be implemented with all of the children in both classes, versus only the children that are not meeting proficiency according to the NWEA MAP test. Increased test scores and reading comprehension skills are two major outcomes that could come from this intervention. Finally, if we were to continue with this research two specific studies

could be performed: determining how weekends and breaks affect fluency and how children evaluating themselves affects reading fluency.

References

- Alley, J. (2011). *The impact of reading on standardized testing*. Retrieved from http://www.nwmissouri.edu/library/researchpapers/2012/Alley
- Bashir, A., & Hook, P. (2009). Fluency: A key link between word identification and comprehension. *Language, Speech, and Hearing Services in Schools*, 196-200. Retrieved from ProQuest.
- Cockerille, A. G. (2014, Fall) Reading workshop in the Montessori classroom. *Montessori Life*, 26 (3)36-43. Retrieved from http://search.proquest.com.pearl.stkate.edu/education/docview/1654946560/A6F1DA7D BE54364PQ/6?accountid=26879.
- Dudley, A., & Mather, N. (2005). Getting up to speed on reading fluency. *New England Reading Association Journal*, 41(1). Retrieved from ProQuest.
- Harris, E. (2010, August). *Evaluating the efficacy of reading fluency instruction*. Retrieved from http://media.proquest.com/media/pq/classic/doc/2323994641/fmt/ai/rep/SPDF?_s=nKqM oCQZKxSzo8nuNoPHykF%2F3c8%3D
- Houser, K. (2016, Jan). *Tracking my progress: fluency*. Inspiring and Encouraging Educators Everywhere with Tips and Resources. http://www.mshouser.com/instructional-coaching/tracking-my-progress-fluency.
- Hosp, J., & Suchey, N. (2014). Reading assessment: Reading fluency, reading fluently, and comprehension-commentary on the special topic. *School Psychology Review*, 43(1).
- Hudson, R., Lane, H., & Pullen, P. (n.d.). Reading fluency assessment and instruction: What, why, and how? *The Reading Teacher*, 702-714;

- Kuhn, M., Rasinski, T., & Zimmerman, B. (2014). Integrated Fluency Instruction: Three

 Approaches for Working with Struggling Readers. *International Journal of Elementary Education*, 7(1).
- K12 Reader reading instruction resources (2015). What is reading fluency? Retrieved from http://www.k12reader.com/what-is-reading-fluency/
- Logsdon, A. (2016). *Understanding regression and why kids lose skills during school breaks*.

 About Health. Retrieved from

 http://learningdisabilities.about.com/od/publicschoolprograms/g/rgrssndefnition.htm
- Malouf, R. C, Reisener, C. D, Gadke, D. L, Wimbish, S. W, Frankel, A. C. (2014). The effects of helping early literacy with practice strategies on reading fluency for children with severe reading impairments. *Reading Improvement:* 269-279. Retrieved from ProQuest.
- National Reading Panel. *Fluency*. pp. 1-39. (Chapter 3). Retrieved from https://www.nichd.nih.gov/publications/pubs/nrp/Documents/ch3.pdf
- NWEA. (2016). Measures of academic progress (MAP). Retrieved from https://www.nwea.org/.
- Palmer, M. L (2010). The relationship between reading fluency, writing fluency, and reading comprehension in suburban third-grade students. *University of San Diego and San Diego State University*, ProQuest Dissertation Publishing. Retrieved from http://search.proquest.com.pearl.stkate.edu/education/docview/817404170/abstract/99A9 308F4D6742C4PQ/3?accountid=26879

- Rasinski, T. (2004). Creating Fluent Readers. *What Research Says About Reading*, 61(6).

 Retrieved from http://www.ascd.org/publications/educational
 leadership/mar04/vol61/num06/Creating-Fluent-Readers.aspx
- Rasinski, T. (2016). *Multidimensional Fluency Rubric*. Reading Fluency Literacy. Retrieved From http://timrasinski.com/?page=presentations.
- Rasinski, T. (August, 2013). Supportive fluency instruction: The key to reading success

 (especially for students who struggle). A Scientific Learning Whitepaper. Retrieved from http://www.scilearn.com/sites/default/files/imported/alldocs/cp/supportive-fluency-instruction.pdf
- Reading is fundamental. (2003). *Literacy facts and stats*. Retrieved from http://www.rif.org/pdf/Literacy-Facts-Stats.pdf.
- Read Naturally. (n.d.). Retrieved from http://www.intensiveintervention.org/content/read-naturally
- Read Naturally Encore Masters Edition. (2014). What struggling reads need to become fluent.

 Teacher's Manual. Saint Paul, Minnesota. Read Naturally, Inc. pp 3
- Read Naturally Intervention Report. (n.d.). Retrieved from http://ies.ed.gov/ncee/wwc/interventionreport.aspx?sid=407
- Reading Rockets. (2015). *Fluency*. Retrieved from http://www.readingrockets.org/helping/target/fluency
- Reading Rockets. (2015). *Types of informal classroom-based assessment: oral reading accuracy*. Retrieved from http://www.readingrockets.org/article/types-informal-classroom-based-assessment.

- Smith, J., Cummings, K., Nese, J., Alonzo, J., Fien, H., & Baker, S. (2014). The relation of word reading fluency initial level and gains with reading outcomes. *School Psychology Review*, *43*(1), 30-30.
- Tolles, Hannah. (2015, June 23). What do these have to do with fluency. Powerpoint Presentation: Orton-Gillingham Training;
- Waseca Biomes. (2016). *Waseca reading program*. Retrieved from http://wasecabiomes.org/products/waseca-reading-program

Welcome to Read Naturally. (n.d.). Retrieved from http://www.readnaturally.com.

Appendices

Appendix A

Student Rubric



I can read with fluency. I put my words together so my reading sounds right and makes sense. This means that I am paying attention to my phrasing.

PHRASING:

1	2	3	4	
I read word-by-word, or one word at a time, like a robot.	I am trying to read the way the author wrote the words. Sometimes I read 2 or	I am really close to reading the words the way the author wrote them. I	I put the words together the way the author wrote them. I put the words together	
- re	3 words at a time. Sometimes I read like - to ad It - fun.	usually read in 3 or 4 word groups.	I like to read fun!	d. It is



I can read with fluency. I read at the correct rate. Not too quickly, and not too slowly. My reading sounds right and makes sense.

RATE:

1	2	3	4
I am really slow and have to figure out each word on the page. I read so slowly that it really does not make sense.	I can be slow because I have to read word-by-word when I don't know the words. I take breaks, pause too much, and repeat words when I read.	I try to read like I talk. Sometimes I go too fast, or too slow. I might slow down when I am trying to figure out a tricky word. Sometimes I pause or stop when it doesn't make sense.	I read like I talk. I only slow down, stop, or repeat words when it make sense and sounds right.



I can read fluently. I use the punctuation to help me know how to read the story, so that it sounds right and makes sense.

PUNCTUATION:

1	2	3	4
I don't pay attention to periods, commas, exclamation points, question marks, and quotation marks when I read. My reading doesn't sound right or make sense.	Sometimes I use the punctuation, but I might use it the wrong way.	I usually pay attention to the punctuation. I may make a mistake every once in a while.	I always pay attention to the punctuation. My reading sounds right and makes sense.



I can read fluently. I read with expression so that it sounds interesting and makes sense.

EXPRESSION:

1	2	3	4
My reading sounds boring and doesn't really make sense because I don't read with expression.	I am trying to read with expression, but I may read it the wrong way sometimes.	I read with expression most of the time. My reading sounds interesting most of the time.	I always read with expression so it always sounds interesting and exciting.

Appendix B

Teacher Fluency Rubric

NAME			

FLUENCY RUBRIC

	1	2	3	4
Expression and Volume	Reads in a quiet voice as if to get words out. The reading does not sound natural like talking to a friend.	Reads in a quiet voice. The reading sounds natural in part of the text, but the reader does not always sound like they are talking to a friend.	Reads with volume and expression. However, sometimes the reader slips into expressionless reading and does not sound like they are talking to a friend.	Reads with varied volume and expression. The reader sounds like they are talking to a friend with their voice matching the interpretation of the passage.
Phrasing	Reads word-by-word in a monotone voice.	Reads in two or three word phrases, not adhering to punctuation, stress and intonation.	Reads with a mixture of run-ons, mid sentence pauses for breath, and some choppiness. There is reasonable stress and intonation.	Reads with good phrasing; adhering to punctuation, stress and intonation.
Smoothness	Frequently hesitates while reading, sounds out words, and repeats words or phrases. The reader makes multiple attempts to read the same passage.	Reads with extended pauses or hesitations. The reader has many "rough spots."	Reads with occasional breaks in rhythm. The reader has difficulty with specific words and/or sentence structures.	Reads smoothly with some breaks, but self- corrects with difficult words and/ or sentence structures.
Pace	Reads slowly and laboriously.	Reads moderately slowly.	Reads fast and slow throughout reading.	Reads at a conversational pace throughout the reading.

Scores of 10 or more indicate that the student is making good progress in fluency.	Score
Scores below 10 indicate that the student needs additional instruction in fluency.	

Rubric modified from Tim Rasinski - Creating Fluent Readers

Appendix C

Observation Form

Morning Observation	Afternoon Observation		
Date:	Date:		
Iow many reading materials out?	How many reading materials out?		
Morning Observation	Afternoon Observation		
Date:	Date:		
How many reading materials out?	How many reading materials out?		

Reading Material:

Books, magazines, Montessori Language Materials, Montessori Command Cards, and Nomenclature

Appendix D
Waseca Reading Program



The Waseca Reading program provides a systematic and sequential presentation of the phonetic elements used in the English language. It follows an approach used in Montessori classroom in which the children spell the word depicted on the card with a moveable alphabet. In the next step, the child lays out all of the cards and matches the label cards. Additional practice involves writing the words and reading words that follow the same phonetic principle in a booklet.

Appendix E

Fluency Graph



Appendix F

Upper Elementary Self Evaluation

Read Naturally on IPAD (One Minute Reader): Reading Fluency

Select your grade (6 th g	graders will use	5 th grade) wit	th a friend.	
What grade is your sto	ory from?	(Grade	_
Book Title				
Story Title				
Cold Read Score	I	Friend Initial		
Read Along Out loud	l #1 (Place a che	eck) Fr	iend Initial	
Read Along Out loud	1 #2 (Place a che	eck) Fr	iend Initial	
Read Along Out loud	l #3 (Place a che	eck) Fr	iend Initial	
Read Alone Score		_ Friend Init	ial	
Quick Quiz Score	F	riend Initial		
RATE YOURSELF	(Please circle)			
Did you read too fast	or too slow?			
Way too slow	a little slow per	fect pace	too fast	way too fast
Did you pause or sto	p when you got	to a period	or question m	ark?
Never A few times	Sometimes	Most	of the time A	lways
Did you read with in	tonation (does	your pitch c	hange)?	
You read like a robot	You had some	change Yo	ou sounded like	a story teller

Appendix G

Multidimensional Fluency Scale for Rasinski (2004)

Jse the following rubric (1–4) to rate reader fluency in the areas of expression and volume, phrasing, smoothness, and pace.

A. Expression and Volume

- Reads words as if simply to get them out. Little sense of trying to make text sound like natural language.
 Tends to read in a quiet voice.
- Begins to use voice to make text sound like natural language in some in areas of the text but not in others.
 Focus remains largely on pronouncing the words. Still reads in a quiet voice.
- C. Makes text sound like natural language throughout the better part of the passage. Occasionally slips into expressionless reading. Voice volume is generally appropriate throughout the text.
- Reads with good expression and enthusiasm throughout the text. Varies expression and volume to match his or her interpretation of the passage.

B. **Phrasing**

- A. Reads in monotone with little sense of phrase boundaries; frequently reads word-by-word.
- B. Frequently reads in two- and three-word phrases, giving the impression of choppy reading; improper stress and intonation fail to mark ends of sentences and clauses.
- C. Reads with a mixture of run-ons, mid-sentence pauses for breath, and some choppiness; reasonable stress and intonation.
 - D. Generally reads with good phrasing, mostly in clause and sentence units, with adequate attention to expression.

B. Smoothness

- A. Makes frequent extended pauses, hesitations, false starts, sound-outs, repetitions, and/or multiple attempts.
 - B. Experiences several "rough spots" in text where extended pauses or hesitations are more frequent and disruptive.
 - C. Occasionally breaks smooth rhythm because of difficulties with specific words and/or structures.
 - D. Generally reads smoothly with some breaks, but resolves word and structure difficulties quickly, usually through self-correction.

B. Pace

- A. Reads slowly and laboriously.
 - B. Reads moderately slowly.
- C. Reads with an uneven mixture of fast and slow pace.
- D. Consistently reads at conversational pace; appropriate rate throughout reading.

Scores range 4–16. Generally, scores below 8 indicate that fluency may be a concern. Scores of 8 or above indicate that the students is making good progress in fluency.

Adapted from Zutell & Rasinski, 1991. Used with permission.