## University of Montana

# ScholarWorks at University of Montana

Graduate Student Theses, Dissertations, & Professional Papers

**Graduate School** 

2017

# The Relationship of Reading Self-Efficacy and Reading Achievement in Second Grade Students

Jennifer L. Hager University of Montana, Missoula

Follow this and additional works at: https://scholarworks.umt.edu/etd

Part of the Elementary Education Commons, and the Language and Literacy Education Commons Let us know how access to this document benefits you.

#### **Recommended Citation**

Hager, Jennifer L., "The Relationship of Reading Self-Efficacy and Reading Achievement in Second Grade Students" (2017). *Graduate Student Theses, Dissertations, & Professional Papers.* 11062. https://scholarworks.umt.edu/etd/11062

This Professional Paper is brought to you for free and open access by the Graduate School at ScholarWorks at University of Montana. It has been accepted for inclusion in Graduate Student Theses, Dissertations, & Professional Papers by an authorized administrator of ScholarWorks at University of Montana. For more information, please contact scholarworks@mso.umt.edu.

# THE RELATIONSHIP OF READING SELF-EFFICACY AND READING ACHIEVEMENT IN SECOND GRADE STUDENTS

By

## JENNIFER LEANN HAGER

B.A. in Education, Carroll College, Helena, Montana 2003

Professional Paper

presented in partial fulfillment of the requirements for the degree of

Master of Arts in Education

The University of Montana Missoula, MT

Official Graduation Date Summer 2017

Approved by:

Scott Whittenburg Graduate School Dean

Georgia A. Cobbs Teaching & Learning

Trent Atkins
Teaching & Learning

Jessica Gallo Teaching & Learning Hager, Jennifer, M.A., Summer 2017

Education

The Relationship of Reading Self-Efficacy and Reading Achievement in Second Grade

Students

Chairperson: Georgia Cobbs

Co-Chairperson: Trent Atkins

Abstract. Academic self-efficacy has been positively related to academic achievement in previous studies with middle school, high school, and undergraduate students. This small-scale study investigated the relationship between student reading self-efficacy and student reading achievement with second grade students in central Montana. Participating students completed a Reading Self-Efficacy Questionnaire and benchmark assessments for reading. The 2011 Dibels Next Reading End of Year Benchmark test was used to measure fluency and the Northwest Evaluation Association Measures of Academic Progress (MAP) Reading for Primary grades test was used to measure the related reading skills of language and writing, foundational skills, literature and information skills, and vocabulary use and functions. Results showed a nonsignificant positive relationship between student reading self-efficacy and student reading achievement. The findings were not conclusive about the abilities of students in this age group to accurately assess their own reading self-efficacy and achievement capabilities.

#### Introduction

Reading is significant to academic achievement in nearly every content area. The impact of a student's reading ability and skill can greatly affect their success in other academic areas and as they progress through their academic careers. Considering this link and the importance of reading to overall student success it is important to explore the impact of outside factors on student reading achievement.

A student's self-efficacy has been shown to impact academic achievement in several previous research studies. According to Albert Bandura (1994), perceived self-efficacy is defined as people's beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives. A person forms these beliefs through personal experiences of mastery, experiences of peers, social or verbal persuasion, and physiological reactions to a task (Bong, Cho, Ahn, & Kim, 2016). In a study of fourth and fifth grade students in Turkey, Sakiz (2015) found academic self-efficacy to be significantly positively associated with students' science achievement. Webb-Williams' study of 10 to 12-year-old students in England in 2014, also found self-efficacy scores to be highly related to student performance in science. In a recent study involving primary aged students in the 1st through 3rd grades from urban schools in various cities in the United States, reading self-efficacy was found to have a positive, significant impact on student performance on three standardized reading measures used in the study (Lee & Jonson-Reid, 2016). The results of the study suggested that reading self-efficacy could be measured in children at a younger age than previously thought.

It is not only significant that self-efficacy may positively affect reading achievement, but people who believe they are capable of performing a task or achieving a goal are more likely to try difficult things and persevere through challenges. "Children's beliefs in their efficacy to

regulate their own learning activities and to master difficult subject matters affect their academic motivation, interest, and scholastic achievement" (Bandura, 1996, p. 1206). This research study investigated the relationships between the self-efficacy of second grade students in reading and their achievement in reading.

### Statement of the Problem

While several studies have been conducted regarding self-efficacy and its relationship with student achievement, very few studies have focused on students at the primary level in first and second grade, and specifically in the domain of reading. In the previously mentioned related study conducted by Lee and Jonson-Reid (2016), self-efficacy was found to have a significant impact on student reading achievement for students in the first through third grades. It was suggested following this study that further research be conducted to support these findings.

## Review of Related Literature

Numerous investigations and studies have been performed focusing on student self-efficacy. Many of these studies also relate the effect of teacher-student relationships and teacher support on student self-efficacy and student achievement. Studies have shown that the implementation of interventions such as improvement of teacher-student relationships, mastery goal orientation, and the creation of an emotionally supportive learning environment can help to improve student academic self-efficacy and student achievement in the content areas of math, science and reading (Mercer, Nellis, Martinez, Kirk, 2011; Bonne & Johnston, 2016; Sakiz, 2015; Hughes & Chen, 2010; Griggs, Rimm-Kaufman, Merritt, Patton, 2013) In a study with 7 to 9 year olds in New Zealand, Bonne and Johnston (2016) found that classroom-based interventions implemented with the goal of increasing student math self-efficacy had a positive effect. Teachers in this study chose "micro-interventions" to incorporate within their lessons

that had previously been shown to be effective such as sharing learning goals with students, using peer models, utilizing student-kept records, and drawing attention to effort and performance by students. The results of the study showed that the intervention group had significant increases in math achievement and math self-efficacy (Bonne & Johnston, 2016). In a similar study performed by Sakiz (2015) in Turkey, students with high perceived teacher affective support and high perceived teacher mastery goal orientation also reported high levels of academic self-efficacy as well as academic enjoyment and behavioral engagement, while also reporting the lowest levels of academic anxiety and receiving the highest grades in science. In a three-year study of students in the second through fourth grades, Hughes & Chen (2010) found that there was a significant indirect effect of teacher-student relationship quality in the first year on peer academic reputation, or the judgement from classmates regarding one's academic competence, in the second year, which affected student academic self-efficacy in the third year. The results of these studies suggest that teachers can have a significant impact on student academic self-efficacy.

There have been several studies conducted with a concentration on self-efficacy beliefs and their relationships with student achievement in math and science. Bonne and Johnston (2016) found consistent moderate positive correlations between mathematics achievement and self-efficacy, while Sakiz (2015) found that academic self-efficacy was significantly positively related to students' science achievement. In a study of 10 to 12-year-olds in England, students' self-efficacy scores were highly related to their performance in science (Webb-Williams, 2014). In relating reading self-efficacy and reading achievement, recent studies have produced mixed results. In a study of first through third graders, Lee and Jonson-Reid (2015) found that self-efficacy had a positive significant impact on the post-test scores on

three standardized reading measures used in their study, while in another study, Corkett, Hatt, and Benevides (2011) found no significant correlations between students' reported reading and writing self-efficacy and their actual abilities. The relationships between student reading self-efficacy and student reading achievement could be explored further.

In recently reviewed literature, most studies investigating relationships between elementary student academic self-efficacy and academic achievement have been conducted with older students in middle school and upper elementary grades. There are mixed evaluations of the abilities of younger students to accurately evaluate self-efficacy and personal abilities. In a study, similar to the present study, Lee and Jonson-Reid (2015) found that students in the first through third grades were able to respond to questions about academic self-efficacy and their results found a positive significant impact on the reading measures used in the study. Conversely, Bong, Cho, Ahn, and Kim (2012) questioned the ability of fifth and sixth grade students to accurately evaluate self-efficacy and ability in academic tasks. They suggested that younger students tend to overestimate their abilities due to a "lack of critical thinking and analytic reasoning ability and also their tendency to equate effort with ability" (Bong, Cho, Ahn, & Kim, p. 339, 2012). According to the literature, older students are able to use more cognitive and logical reasoning to evaluate their abilities and hence have more negative but accurate views of what they can achieve (Bong, Cho, Ahn, & Kim, 2012). Similarly, Corkett, Hatt, and Benevides (2011) also expressed concern that student age may have impacted the result of their self-efficacy measures. Analysis suggested that sixth grade students in the study were not effective at accurately predicting their own reading and writing ability as a result of their young age. The authors explained that student evaluation of academic self-efficacy increases in accuracy as students get older (Corkett, Hatt, & Benevides, 2011). Recent studies by Hughes

and Chen (2010) and Webb-Williams (2014) involved students from younger age groups but did not address the ability of these students to accurately assess their own self-efficacy or abilities. In addition, Bonne and Johnston (2016) specifically addressed the young age of their participants, by taking careful consideration to make sure the students understood the vocabulary and tasks involved in the measures. Considering these mixed results, student academic self-efficacy and its relationships with academic achievement should be explored further with participants at younger ages.

## Statement of the Hypothesis

Self-efficacy has been positively related to achievement in previous studies with older students in the areas of math and science. I predicted that second graders would be able to accurately report on their self-efficacy regarding their reading ability and that students who have a high self-efficacy in reading would perform better and have higher achievement on benchmark reading assessments than students whose reading self-efficacy was lower. More confidence in ability to perform reading tasks would show a positive relationship with higher reading skills.

#### Method

### **Participants**

The participants in this study were 43 second grade students at an elementary school in central Montana. The group included 23 boys and 20 girls whose ages ranged from 7 to 9 years old. Participants were determined by those who returned a signed Parental Permission form and signed student assent form.

#### Instruments

Student reading fluency was measured using the 2011 Dibels Next Reading End of Year Benchmark test. Other related reading skills, including foundational skills, language and writing,

literature and informational skills, and vocabulary use and functions, were measured using the Northwest Evaluation Association Measures of Academic Progress (MAP) Reading for Primary grades test.

Student reading self-efficacy was measured using a custom designed questionnaire adapted from the Motivation for Reading Questionnaire (MRQ) developed by Wigfield and Guthrie in 1997. While the MRQ has several subscales and only 3 items related to self-efficacy, the instrument in this study was designed to target specific reading skills and was focused towards the specific age group in this study. A sample item in this questionnaire is "I can read a story and answer questions about it correctly." The questionnaire was reviewed by six second grade classroom teachers and revised or edited to receive their endorsement. Each item of student reading self-efficacy was measured by a 4-point Likert-type scale (1= "Very different from me" to 4= "A lot like me".) Responses to certain items are reverse-coded as needed to relate higher scores with higher self-efficacy.

## Design

This study was an investigation of the relationships between student reading self-efficacy and student reading achievement. Participants of the study were nearing the completion of their second-grade academic year and completed benchmark testing in reading fluency and basic reading skills. To evaluate and analyze the relationship of student self-efficacy to student achievement on these benchmark assessments, students also completed the self-efficacy questionnaire.

#### Procedure

Participants of the study were in the ninth month of their second-grade year of school.

Following the distribution of an informational and parental response letter regarding the details

of the study, participating students responded to the reading self-efficacy questionnaire in a whole group session with direction and guidance from the classroom teacher. The teacher guided students through a set of practice questions that were designed to be similar to the items about reading within the questionnaire. Then students responded to the questionnaire items regarding their reading self-efficacy.

Participating students also completed the Dibels Next assessment of reading fluency in a private one on one setting with their classroom teacher. In this assessment, students read three separate passages for one minute each while their teacher listened and scored the accuracy of that reading. Students completed the end of year Northwest Evaluation Association Measures of Academic Progress (MAP) Reading for Primary grades test in a whole group setting in a computer lab on individual personal computers. Students worked at their own pace while the teacher monitored their progress.

Following an analysis of student responses on the self-efficacy questionnaire and the relationships with reading assessment results, interviews with a select group of students were conducted. These interviews were conducted to further investigate the relationships between student self-efficacy and reading achievement results.

#### Results

The results for the reading assessments showed that 35 out of 43 student participants scored in the Benchmark or higher range for reading fluency, while 25 were in that range on the MAPs assessment of reading skills. In the strategic, or below benchmark range, there were 3 students for oral reading fluency and 14 students for MAPs reading skills. The results also showed that 5 students scored in the well below benchmark or intensive range for oral reading

fluency while 4 scored in that range for the MAPs assessment. These results are shown in the following table.

Percentage of Participants (n=43)	Dibels	Maps
scoring at each achievement level		
At or above benchmark	81.3% (35 students)	58.1% (25 students)
Strategic (just below benchmark)	6.9% (3 students)	32.5% (14 students)
Intensive (well below benchmark)	11.6% (5 students)	9.3% (4 students)

The results of the Dibels Next and MAPs reading assessments were compared with the student responses to the 10 items on the Reading Self-Efficacy Questionnaire. One model (available in Appendix A) shows an overall average student reading self-efficacy as compared to students who scored well above benchmark, at or slightly above benchmark, slightly below benchmark, and well below benchmark in each reading assessment. A second model (available in Appendix B) shows the percentage of students at a given benchmark achievement level (At or Above Benchmark, Below Benchmark or Strategic, and Well Below Benchmark or Intensive) who recorded a particular response (A lot like me, a little like me, a little different from me, and a lot different from me) for each item in the Reading Self-Efficacy questionnaire.

For overall reading self-efficacy, the results show that students who scored well above benchmark for both the MAP reading skills test and the Dibels Next fluency assessment also had a slightly higher score for overall self-efficacy on this questionnaire than students who scored at benchmark or below benchmark on those assessments. Overall reading self-efficacy scores on average decreased slightly as the scores on the reading assessments decreased with the exception of students scoring well below benchmark on the reading assessments having a slightly higher score on the questionnaire than the students scoring slightly below benchmark or at and slightly above benchmark for fluency.

In a comparison of reading assessment results and responses to the items on the Reading Self-Efficacy Questionnaire, 74% of students who scored at benchmark or higher on the Dibels Next Oral Reading Fluency Assessment also perceived themselves to be good readers and 76% of students in the benchmark range for the MAPs reading assessment answered in the same way. While students in the strategic and intensive range were more likely to say that being a good reader was "A little like me". When responding to statements about retelling a story or answering questions correctly, a higher percentage of benchmark students, 46% for Dibels, and 52% for MAPs, responded positively, and most intensive students, 80% for Dibels and 50% for MAPs, also responded positively.

When responding to items related to feeling nervous, (#6) or challenged (#4) by reading tasks, which were reverse coded, each performance level had nearly equivalent percentages of students with each type of response. In contrast, most students performing at or above benchmark, 71% for Dibels and 68% for MAPs, responded that they were ready to read more challenging stories, while responses from students at the strategic and intensive levels were more spread between the other responses for that statement. Likewise, much of each performance group responded that they had worked hard at reading this year and they were getting better, and that they will do well in reading in the future.

#### Interview Results

Students from each performance level, above benchmark and below benchmark, and from various levels of reading self-efficacy responses on the questionnaire, low to high, were interviewed for further information about their reading self-efficacy. In this short interview (available in Appendix C), students were asked open-ended questions about their reading.

Sample questions from the interview were, "What is the hardest thing about reading?" and "How

can you improve your reading ability?" Of the 43 participants in the study, 10 students were interviewed representing high performance with high self-efficacy, high performance with lower self-efficacy, low performance with high self-efficacy, and low performance with lower self-efficacy. Seven of the students interviewed were boys and three were girls.

Two students were interviewed who performed above benchmark on the reading assessments and had high self-efficacy responses on the questionnaire. When asked what the hardest thing was about reading, Student 1 stated that "there isn't anything hard about reading", while Student 2 said it was "big words that I don't know" to which he responds by asking an adult for help. Both Student 1 and Student 2 indicated that in order to improve reading ability you need to practice it because, according to Student 1 "every time you practice something you get better at it" and Student 2 says, "it has happened to me before." Both students also indicated that they had encouragement or involvement from their parents in reading outside of school, and that it was something that they enjoyed.

I also interviewed two students who performed above benchmark on the reading assessments, but had lower self-efficacy responses for several statements on the questionnaire. Both of these students stated that what they found difficult about reading was when they encountered words that they did not know. They also indicated that when this happens, they sound out the word as best they can and then keep reading. These two students also indicated that they struggled a bit with retelling what they have read about. One of these students, Student 3, said that her mother encouraged her to practice reading at home frequently to improve, while the other, Student 4, indicated that he probably could have worked harder in reading this year and he made a little bit of improvement.

Two students who were interviewed performed below benchmark on the reading assessments but responded to the statements on the questionnaire with high self-efficacy. They both stated in their interviews that reading is something that they enjoy and that they will practice to improve. For one student in this group, Student 5, the hardest thing about reading is reading in a group and waiting for others to take their turn, while Student 6 said it was encountering words that he did not know. Their inflated reading self-efficacy scores may be explained by their developmental ability to understand the questions they were being asked, as well as what was suggested in the literature as a young student's "tendency to equate effort with ability" (Bong, Cho, Ahn, & Kim, p. 339, 2012).

Three of the students that I interviewed scored below benchmark on the reading assessments and also had responses of lower self-efficacy on the questionnaire. Two of these students, Students 7 and 8, said that something that they like about reading is that they get to learn hard words that they didn't know before. Students 8 and 9 said the hardest thing about reading for them was the length of time spent reading and the amount of reading that they had to complete at one time. Students 8 and 9 also indicated that they needed to practice reading to improve because, "right now I'm not a pretty good reader," (Student 8) and "I get messed up sometimes" (Student 9) when reading. These three students had negative responses to statements about reading at a good pace and accurately as well as indicating that reading was hard for them and they sometimes make mistakes.

One of the interviewed students scored below benchmark in reading fluency but above benchmark on the MAPs assessment of reading skills. He had responses of lower self-efficacy on the questionnaire. This student responded with the positive, "a lot like me" response when given the statements about retelling what was read or answering questions accurately, but also

responded with the negative, "a little different from me" when given statements about fluency and reading clearly and accurately. When interviewed, this student said that being a good reader was "a little bit like" him because he just needed to practice more "because practicing is the only way to get better." The hardest thing about reading for this student was "being frustrated when trying to figure out big words by sounding them out." He also stated that he "would probably enjoy reading more if it wasn't frustrating."

While the interviewed students had very different scores on the reading assessments and responded in a variety of ways on the Reading Self-efficacy questionnaire, they had many of the same concerns in what made reading difficult in second grade and in what they needed to do to improve their reading abilities. Most students said that the hardest thing about reading was figuring out big words or words that they were unfamiliar with. Most students also said that they would practice to improve their reading.

### Discussion

In general, students who answered with a positive "A lot like me" or "A little like me" response on the questionnaire items were most often students who scored in the benchmark and higher range for oral reading fluency and reading skills. Students in the strategic and intensive performance levels had responses that varied greatly depending on the statement and the individual. In some cases, high performance in one reading assessment did not equate to high performance in another. For example, one reader with very high fluency and another reader with very low fluency had nearly the same score, slightly above benchmark, on the MAPs test. The differences in how children evaluate good reading, for example, a good reader reads clearly and accurately or a good reader reads for understanding, and where they see themselves in that spectrum, may impact their self-efficacy in reading.

Although the trend of the overall self-efficacy scores showed higher scores for students in the benchmark range for reading assessments than the strategic or intensive ranges, the differences in self-efficacy scores between performance groups was not significant. Students who scored in the strategic and intensive levels for reading assessment, also still believed themselves to be good readers who could work hard and practice to improve their reading abilities. While some second-grade students seemed to be able to accurately assess their reading abilities, others may have lacked the analytic reasoning ability to make accurate assessments.

## Conclusion and Implications

Overall, the findings of this study do not strongly support the hypothesis that students with more positive reading self-efficacy would also attain higher scores on reading achievement assessments in the second grade. While the results from the study show a slightly higher sense of self-efficacy for students who scored higher on reading assessments, the differences in self-efficacy responses were not significant. The results from the self-efficacy questionnaire also show that while some students in this age group are developmentally capable of assessing their own reading abilities, others may not have the reasoning ability to do so accurately.

There are limitations to this study that must be acknowledged. This research study took place in a relatively short amount of time and each measure was only assessed at one time for each student. The Reading Self-Efficacy Questionnaire used in this study, while it was reviewed and assessed by my colleagues, had not been used in previous studies and did not have a measure of reliability and validity. In addition, a majority of the small number of participants were students who performed at or above benchmark while very few participants performed at the strategic and intensive levels. These uneven numbers created a skewed view of the percentage of responses at these levels for each item on the questionnaire. Two students in the participants

group and interview group were members of my own family which may have impacted analysis. Similarly, students who were interviewed may have felt the need to give a teacher the "correct" answer even though they were told that there were no right answers.

While students who performed well on assessments of reading achievement also tended to have a higher sense of self-efficacy in reading, most student participants in this age group regardless of achievement scores viewed themselves as learners who were working to improve and believed themselves capable of doing well in reading.

Further study of what may affect or mediate self-efficacy in elementary students and what role teachers play in impacting student academic self-efficacy is necessary. As a result of this study, a future focus in my classroom will be on learning about the effects of teacher-student communications regarding student self-efficacy and the possibility of building the self-efficacy of students to promote further academic achievement. Variables such as feedback to students, grouping methods, goal setting, and response to effort and achievement are areas that should be studied further for their impact on student self-beliefs and student academic achievement with this age group.

#### References

- Bandura, A. (1994). Self-efficacy. In V.S. Ramachaudran (Ed.) Encyclopedia of human behavior (Vol. 4, pp. 71-81). New York: Academic Press. (Reprinted in H. Friedman [Ed.], Encyclopedia of mental health. San Diego: Academic Press, 1998). Retrieved from: https://www.uky.edu/~eushe2/Bandura/BanEncy.html
- Bandura, A., Barbaranelli, C., Caprara, G., & Pastorelli, C. (1996). Multifaceted Impact of Self-Efficacy Beliefs on Academic Functioning. Child Development, 67(3), 1206-1222. doi: 10.2307/1131888
- Bandura, A. (2006) Self-Efficacy Beliefs in Adolescents: Guide for Constructing Self-Efficacy Scales. 307-337. Information Age Publishing. Retrieved from:

  https://www.uky.edu/~eushe2/Bandura/BanduraGuide2006.pdf
- Bong, M., Cho, C., Ahn, H., & Kim, H. (2012). Comparison of Self-Beliefs for Predicting Student Motivation and Achievement. *The Journal of Educational Research*, 105(5), 336-352.
- Bonne, L., & Johnston, M. (2016). Students' beliefs about themselves as mathematics learners. *Thinking Skills and Creativity, 20*, 17-28.

  doi:http://dx.doi.org.weblib.lib.umt.edu:8080/10.1016/j.tsc.2016.02.001
- Corkett, J., Hatt, B., & Benevides, T. (2011) Student and Teacher Self-Efficacy and the

  Connection to Reading and Writing. *Canadian Journal of Education*. 34(1), pp. 65-98.

  Retrieved from

  http://www.jstor.org.weblib.lib.umt.edu:8080/stable/pdf/canajeducrevucan.34.1.65.pdf

- Griggs, M. S., Rimm-Kaufman, S., Merritt, E. G., & Patton, C. L. (2013). The responsive classroom approach and fifth grade students' math and science anxiety and self-efficacy. *School Psychology Quarterly, 28*(4), 360-373. Retrieved from <a href="https://search-proquest-com.weblib.lib.umt.edu:2443/docview/1415593692?accountid=14593">https://search-proquest-com.weblib.lib.umt.edu:2443/docview/1415593692?accountid=14593</a>
- Guthrie, J. & Wigfield, A. (2010) Motivations for Reading Questionnaire. Retrieved from http://cori.umd.edu/measures/MRQ.pdf
- Hughes, J. N., & Chen, Q. (2011). Reciprocal effects of student-teacher and student-peer relatedness: Effects on academic self-efficacy. *Journal of Applied Developmental Psychology*, 32(5), 278-287. Retrieved from https://search-proquest-com.weblib.lib.umt.edu:2443/docview/898323537?accountid=14593
- Lee, Y. S., & Jonson-Reid, M. (2016). The role of self-efficacy in reading achievement of young children in urban schools. *Child & Adolescent Social Work Journal*, *33*(1), 79-89. doi:http://dx.doi.org.weblib.lib.umt.edu:8080/10.1007/s10560-015-0404-6
- Mercer, S. H., Nellis, L. M., Martinez, R. S., Kirk, M. (2011) Supporting the students most in need: Academic self-efficacy and perceived teacher support in relation to within-year academic growth. *Journal of School Psychology*, 49(3), 323-338. Retrieved from <a href="http://www.sciencedirect.com.weblib.lib.umt.edu:8080/science/article/pii/S00224405110">http://www.sciencedirect.com.weblib.lib.umt.edu:8080/science/article/pii/S00224405110</a>
- Sakiz, G. (2015). Perceived teacher factors in relation to students' achievement-related outcomes in science classrooms in elementary school. *European Journal of Science and Mathematics Education, 3*(2), 115-129. Retrieved from <a href="https://search-proquest-com.weblib.lib.umt.edu:2443/docview/1826539232?accountid=14593">https://search-proquest-com.weblib.lib.umt.edu:2443/docview/1826539232?accountid=14593</a>

Webb-Williams, J. (2014). Gender differences in school children's self-efficacy beliefs: Students' and teachers' perspectives. *Educational Research and Reviews*, *9*(3), 75-82. Retrieved from https://search-proquest-com.weblib.lib.umt.edu:2443/docview/1651834017?accountid=14593

# Appendix A

The Reading Self-Efficacy Questionnaire used in this study consisted of 10 items. Each item of student reading self-efficacy was measured by a 4-point Likert-type scale (1= "Very different from me" to 4= "A lot like me".) Responses to certain items were reverse-coded as needed to relate higher scores with higher self-efficacy. A score of 40 would be the highest possible score, meaning a student answered with "A lot like me" on all of the items.

Total Reading Self-Efficacy Average Scores

	MAP Test	Dibels Reading Fluency	
Well above benchmark	35.5	35.6	
At or slightly above benchmark	33.8	31.8	
Slightly below benchmark	31.7	31	
Well below benchmark	32.5	32	

# Appendix B

The following tables show the percentage of students in each range that answered in a particular way on the Reading Self-Efficacy Questionnaire. The number in parentheses tells the actual number of students answering in that way.

# 1. I am a good reader.

	Benchmark		Strategic		Intensive	
	Dibels	MAPs	Dibels	MAPs	Dibels	MAPs
A lot like me - 4	74% (26)	76% (19)		50% (7)	40% (2)	50% (2)
A little like me - 3	23% (8)	24% (6)	100% (3)	43% (6)	60% (3)	50% (2)
A little different from me - 2	3% (1)			7% (1)		
A lot different from me - 1						

## 2. When I read aloud, I read at a steady pace and read all the words correctly.

	Benchmark		Strategic		Intensive	
	Dibels	MAPs	Dibels	MAPs	Dibels	MAPs
A lot like me - 4	32% (11)	28% (7)		29% (4)	20% (1)	25% (1)
A little like me - 3	54% (19)	56% (14)	66% (2)	35% (5)		50% (2)
A little different from me - 2	11% (4)	16% (4)	33% (1)	29% (4)	80% (4)	25% (1)
A lot different from me - 1	3% (1)			7% (1)		

## 3. After I read a story, I can tell about what I read.

	Benchmark		Strategic		Intensive	
	Dibels	MAPs	Dibels	MAPs	Dibels	MAPs
A lot like me - 4	46% (16)	52% (13)	33% (1)	43% (6)	80% (4)	50% (2)
A little like me - 3	26% (9)	28% (7)	33% (1)	21% (3)	20% (1)	25% (1)
A little different from me - 2	23% (8)	12% (3)		29% (4)		25% (1)
A lot different from me - 1	5% (2)	8% (2)	33% (1)	7% (1)		

# 4. Reading is hard for me and sometimes I make mistakes. (Reverse Coded)

	Benchmark		Strategic		Intensive	
	Dibels	MAPs	Dibels	MAPs	Dibels	MAPs
A lot different from me - 4	29% (10)	36% (9)	33% (1)	14% (2)	20% (1)	25% (1)
A little different from $me - 3$	34% (12)	32% (8)		36% (5)	40% (2)	25% (1)
A little like me − 2	20% (7)	20% (5)	66% (2)	29% (4)	20% (1)	25% (1)
A lot like me – 1	17% (6)	12% (3)		21% (3)	20% (1)	25% (1)

# 5. When I read aloud, I sound great and listeners can understand the story.

	Benchmark		Strategic		Intensive	
	Dibels	MAPs	Dibels	MAPs	Dibels	MAPs
A lot like me - 4	54% (19)	52% (13)	33% (1)	50% (7)	40% (2)	50% (2)
A little like me - 3	40% (14)	40% (10)	66% (2)	43% (6)	40% (2)	50% (2)
A little different from me - 2	6% (2)	8% (2)		7% (1)	20% (1)	
A lot different from me - 1						

# 6. Reading aloud by myself makes me feel nervous. (Reverse Coded)

	Benchmark		Strategic		Intensive	
	Dibels	MAPs	Dibels	MAPs	Dibels	MAPs
A lot different from me – 4	43% (15)	48% (12)	33% (1)	29% (4)	40% (2)	50% (2)
A little different from $me - 3$	17% (6)	12% (3)	33% (1)	21% (3)		25% (1)
A little like me- 2	23% (8)	28% (7)	33% (1)	29% (4)	40% (2)	
A lot like me - 1	17% (6)	12% (3)		21% (3)	20% (1)	25% (1)

# 7. I can read a story and answer questions about it correctly.

	Benchmark			Strategic	Intensive	
	Dibels	MAPs	Dibels	MAPs	Dibels	MAPs
A lot like me - 4	46% (16)	56% (14)	33% (1)	29% (4)	40% (2)	25% (1)
A little like me - 3	48% (17)	40% (10)	66% (2)	64% (9)	60% (3)	75% (3)
A little different from me - 2	6% (1)	4% (1)		7% (1)		
A lot different from me - 1						

# 8. I am ready to try reading more challenging stories.

	Benchmark		Strategic		Intensive	
	Dibels	MAPs	Dibels	MAPs	Dibels	MAPs
A lot like me - 4	71% (25)	68% (17)	33% (1)	64% (9)	40% (2)	50% (2)
A little like me - 3	20% (7)	28% (7)	33% (1)	15% (2)	20% (1)	
A little different from me - 2	9% (3)	4% (1)	33% (1)	21% (3)	40% (2)	50% (2)
A lot different from me - 1						

# 9. I have worked hard at reading this year and I am getting better.

	Benchmark		Strategic		Intensive	
	Dibels	MAPs	Dibels	MAPs	Dibels	MAPs
A lot like me - 4	80% (28)	84% (21)	100% (3)	79% (11)	60% (3)	50% (2)
A little like me - 3	14% (5)	12% (3)		7% (1)	20% (1)	50% (2)
A little different from me - 2	6% (2)	4% (1)		7% (1)		
A lot different from me - 1				7% (1)	20% (1)	

# 10. I will do well in reading in the future.

	Benchmark		Strategic		Intensive	
	Dibels	MAPs	Dibels	MAPs	Dibels	MAPs
A lot like me - 4	85% (30)	92% (23)	66% (2)	71% (10)	100% (4)	100% (4)
A little like me - 3	15% (5)	8% (2)		22% (3)		
A little different from me - 2			33% (1)	7% (1)		
A lot different from me - 1						

# Appendix C

The following are the interview questions that were asked following analysis of the data.

- 1. Why did you say that being a good reader is (like/not like) you?
- 2. What is the hardest thing about reading?
- 3. What do you do when you come to a difficult word or a word you don't know?
- 4. Is there something that you like about reading?
- 5. When you choose for yourself, what kind of books do you choose to read?
- 6. How can you improve your reading ability?
- 7. Do you plan to continue to read this summer? Why or why not?