

Effect of Time Spent Independently Reading on Reading Proficiency

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While the reading teacher uses standards to guide her instruction of reading skills, she ultimately wants her students to love literature, enjoy reading, and find reading to be a worthwhile activity. It is critical that students see reading as an enjoyable task—a pastime that will take them on unimaginable adventures and answer their many questions about the world.

With summer break and second-grade looming ahead, first-grade teachers begin to ask what habits their students have developed this year in preparation for the coming months. Will they pick up a book and read for pleasure this summer? Will they find that “just-right” book that is both exciting and at an appropriate level of challenge? Will they grow to love reading and find that they are able to learn from their books? As K-2 teachers prepare students to become lifetime readers, they are mindful of research being done at the Grade Level Reading Campaign that focuses on grade-level reading proficiency by third grade. But what happens to those who are still learning to read in third grade? Because of their literacy deficiencies, most likely they are 13 times more likely to drop out of high school and will be unqualified for 90% of available jobs in their communities (The Statisticks Lottery, 2017). Much is at stake. Furthermore, studies confirm that reading achievement is linked to time spent reading (Anderson, Fielding, & Wilsonm, 1988; Arkley, 1969; Burgess, 1985; Moss & Young, 2012). The manner in which families and teachers interact with children in regard *does* matter.

In the first-grade classrooms at Meadowlark, teachers work diligently to build students' reading stamina. By the end of first grade, during classroom reading time, many first graders can read for more than thirty minutes. However, we wondered which students transfer this stamina to reading at home for pleasure, how often they choose reading over television or other activities, and if an increased amount of time spent reading at home make a difference in their reading proficiency at school. The purpose of this research study was to determine if there is a positive correlation for first-grade students at Meadowlark Elementary between reading proficiency in school and total minutes spent independently reading.

Participants

During the early stages of this project, it was clear that action research, defined as “any systematic inquiry conducted by teachers, principals, school counselors, or other stakeholders in the teaching-learning environment,” would best fit the personal and professional goals we hold for ourselves in our teaching practice (Gay, Mills, & Airasian, 2009, p. 486). Nestled in the Micropolitan town of Bozeman, Montana, Meadowlark Elementary School is home to 507 students who come from a variety of ethnicities, socioeconomic statuses, and home environment situations. At Meadowlark, our teachers, paraprofessionals, and administrators recognize the diverse needs of our students, and we strive to help every child succeed. Participants for this research study were 80 first-grade students at Meadowlark: 45 are male while 35 are female. Slightly over 13 percent qualify for free lunch and two percent qualify for reduced lunch.

Measurements

For this four-week study, we created a reading log for each week, which included a column for the date, title of book, and total minutes read. Sent home with students on the Monday of each week and returned to school each Friday, no weekend reading minutes were actively collected. Students who returned their logs (even if they didn't read at home that week), were rewarded with a movie ticket that granted them access to a special movie on Friday at lunch time. Some of the returned logs were filled out by parents, while others were completed by the student. We expected that first-grade students would read about 15 minutes per night, or 60-75 minutes per week. In addition to tracking minutes read, we also administered a running record at the beginning and end of our data collection period that reported each child's independent reading level. This reading level was then converted into a proficiency score: a 1 corresponded to students who read at a Level E or lower, 2 signified that a student read at level F, 3 stated that a student read at a level G/H, and 4 represented students who read at Level I or above. These benchmarks were determined by Fountas and Pinnell.

Data and Results

The following scatterplots depict the results of this research study, as calculated by each student's reported reading time at home and his or her measured reading proficiency at school. The total minutes read during the four-week study is measured on the y-axis. The reading proficiency level, determined on the final week of the study, is measured on the x-axis. The reading levels have been transformed from an alphabetical to numerical value. By March, (the time of our study) the benchmark level of reading for first graders is a G or H, which is represented by a seven or eight on each graph. See

Figure 1 for numerical values of reading levels. Figures 2-6 represent the data unique to each class of students. Below those, Figures 7 and 8 show the collective data of first grade students at Meadowlark. The trendline on each figure indicates the general course of tendency of our data.

Reading Level Conversions	
Alphabetic Level (by Fountas and Pinnell)	Numerical Code
A	1
B	2
C	3
D	4
E	5
F	6
G	7
H	8
I	9
J	10
K	11
L	12
M	13
N	14

Figure 1: Reading level conversion chart. This chart shows how we changed our alphabetical leveling system into a numerical measurement for the graphs. Each alphabetic letter corresponds to a level of reading proficiency.

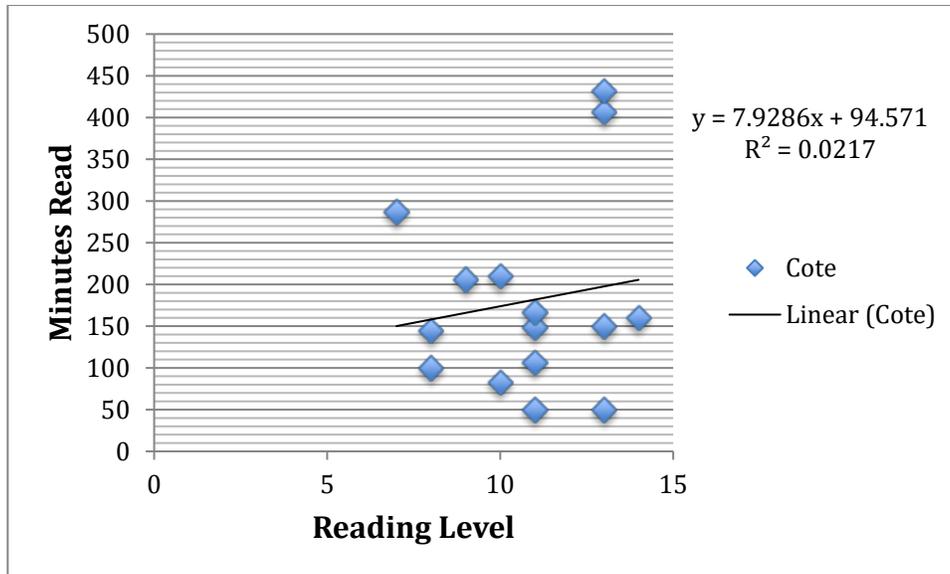


Figure 2: Ms. Cote's class reading data. The range of reading proficiencies in the class range from a Level G (7) to Level N (14). The amount of minutes read during the 4-week period range from 0 to 432 minutes.

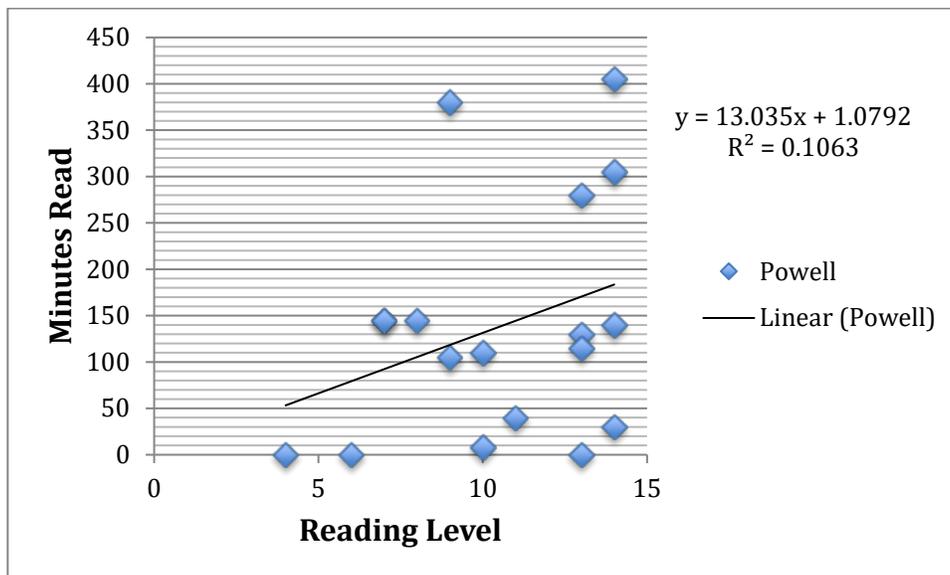


Figure 3: Mrs. Powell's class reading data. The range of reading proficiencies in the class range from a Level D (4) to Level M (13). The amount of minutes read during the 4-week period range from 0 to 405 minutes.

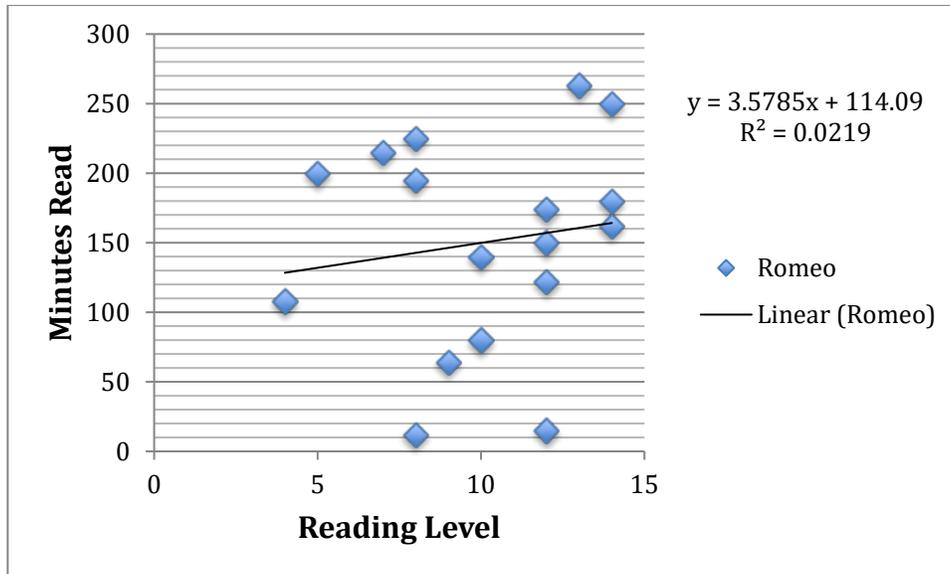


Figure 4: Mrs. Romeo’s class reading data. The range of reading proficiencies in the class range from a Level D (4) to Level M (13). The amount of minutes read during the 4-week period range from 12 to 263 minutes.

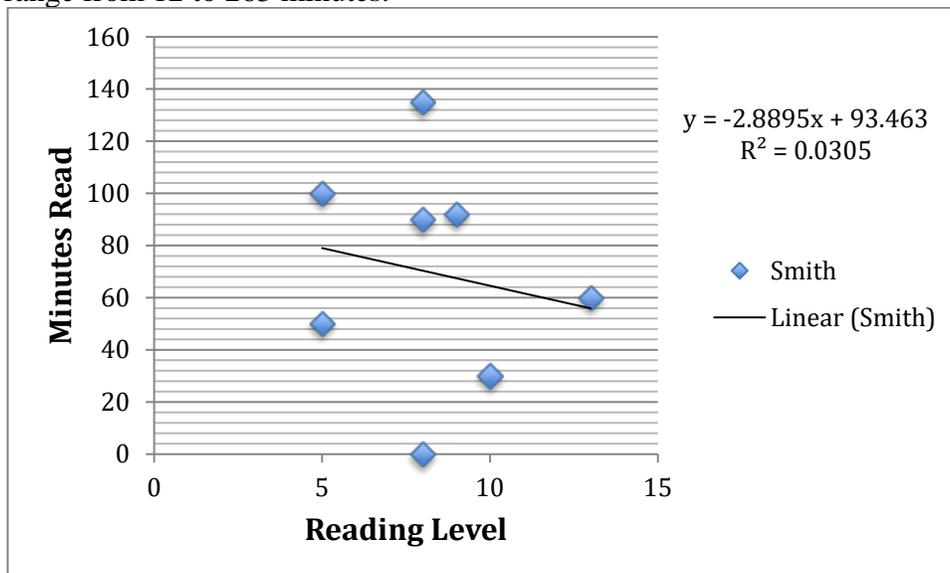


Figure 5: Ms. Smith’s class reading data. The range of reading proficiencies in the class range from a Level C (3) to Level M (13). The amount of minutes read during the 4-week period range from 0 to 135 minutes.

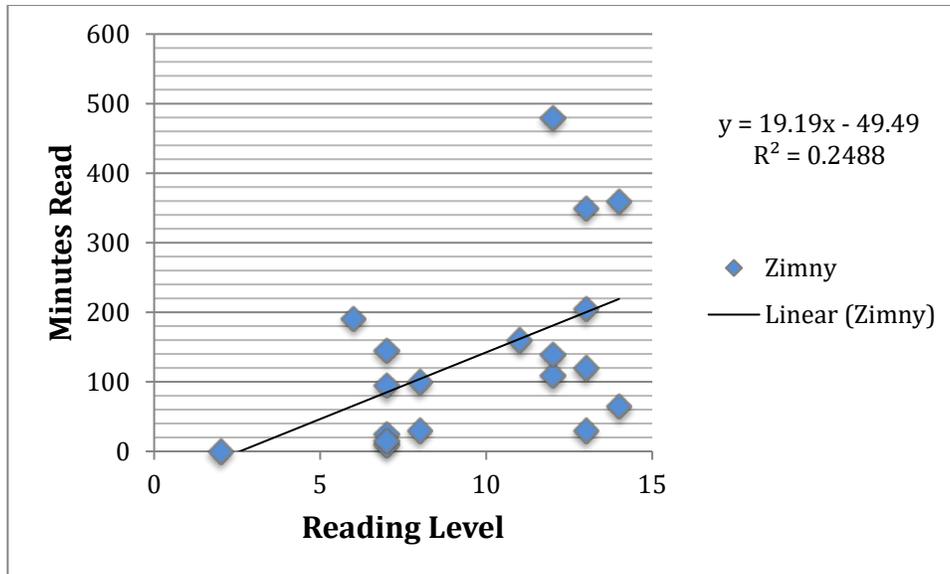


Figure 6: Mrs. Zimny's class reading data. The range of reading proficiencies in the class range from a Level B (4) to Level N (14). The amount of minutes read during the 4-week period range from 0 to 480 minutes.

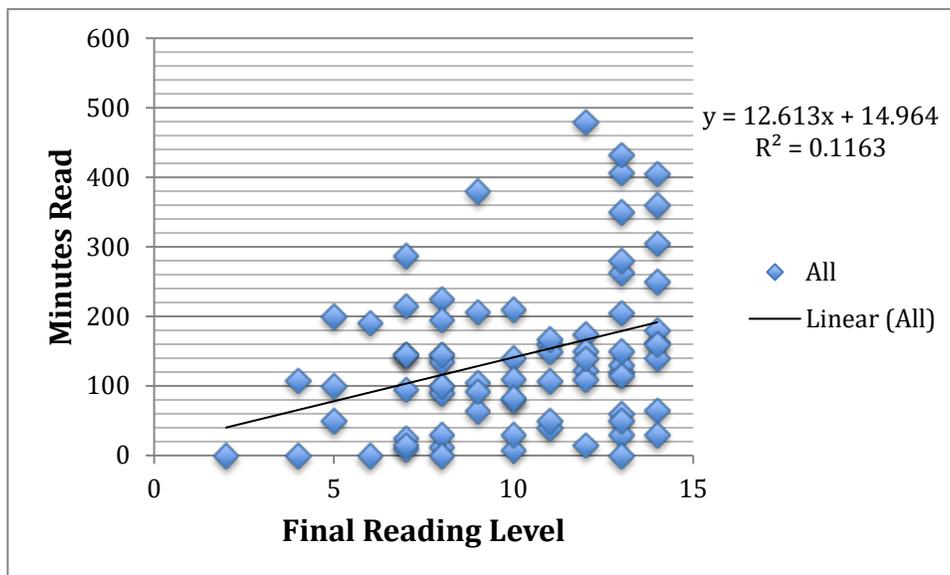


Figure 7: Data from all first-grade classes. This figure combines all class data into one scatterplot.

Our figures, for both individual classes and the collective, reflect a low positive correlation between amount of minutes independently read and level of reading proficiency. The data collected during this study indicate that students who read more

minutes will likely be more proficient readers, though there are pieces that require dissection and explanation. While the trendline demonstrates a link between number of minutes spent independently reading and reading proficiency, it does not explain the condition(s) under which that happens. There are many students who are proficient readers, but did not extensively read at home during the study—observe the data points below the trend lines on all figures that lie between a reading proficiency of 12 and 16. Those readers are likely able to read early chapter books and are considered strong first-grade readers, but many of them do not opt for reading independently, at least for sustained amounts of time. There are also many readers below proficiency (below a reading level 7 or 8) who read extensively and appear above the trendline for minutes spent reading at their proficiency levels.

Our data show a low positive correlation because the R^2 value is between 0.0 and 0.5, indicating how well the trend line fits the data points. Because we have Level G readers (proficient) reading a range of 0 minutes to 300 minutes during the study, the data does not conform to the trend line; rather, it builds in a triangular fashion. It seems that the more readers at a particular level, the more variance occurs in number of minutes spent reading. On the other hand, many of the more proficient readers (G and above) spent the greatest amount of time reading independently. We also have a substantial number of students who are proficient readers, so the data clusters on those levels. Because we are collecting data from a population of 80 students, there isn't enough data to definitively say that *all* proficient readers read more than non-proficient readers. Though the results and data vary, we can conclusively report that students who read more at home have a higher likelihood of also being high-performing readers.

Conclusion

From the onset, we knew that the outcomes of this research would be shared with the teachers and parents at Meadowlark Elementary. It is likely that most of the parents in our school know the value of independent reading, even if they do not understand its link to reading proficiency. For those who do not know about or contest the connection between independent reading and reaching achievement, we now have some data to support our claims. We need to work together with other teachers, families, and students to determine what resources, training, or support is needed to promote healthy reading habits at home. These results will hopefully influence teachers to educate their readers on independent reading and parents to make independent reading time a priority in their afternoon and evening routines. Did some students change their reading habits specifically for this study? If so, does this data really reflect the amount of time that they usually spend independently reading? Do Meadowlark families have sufficient resources to support their child's independent reading at home?

These questions provide for us a lens to look through going forward. Even though most families understand the importance of making time for their youngsters to read for pleasure at home, it is quite apparent that many children are not doing so on their own. We are curious as to what kinds of obstacles prevent students from actively reading at home for their own enjoyment. Is it a lack of resources? Are there time barriers as children bounce from activity to activity? Do parents make reading a priority in the home?

Before and during the implementation of this project, we started asking ourselves the second key question, which may require many years of intensive research. Are

students more proficient readers because they read more, or do they read more because they are proficient readers? It's really a question of the chicken and the egg, and this project has only solidified the importance of identifying the source of why readers excel in reading so all students can find reading to be an enjoyable pastime.

Like all other skills—learning to bake, riding a bike, or hitting a softball—reading must be practiced. Thus, it is imperative that lower-elementary teachers share with parents that knowledge of how reading at home can advance reading competence. We, the reading teachers of Meadowlark Elementary, want our students to ultimately fall in love with the many worlds that can only be reached through reading.

References

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