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The Effect of Extended Intervention Time on Reading Growth for Middle School Students, Performing Below Grade-Level in Reading

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The Effect of Extended Intervention Time on
Reading Growth for Middle School Students,
Performing Below Grade-Level in Reading

A Project Presented to
The Graduate Faculty of
Minnesota State University Moorhead

By

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Study Abstract

The purpose of this action research study was to determine the effect of extended reading intervention time on the reading growth of middle school students who were below grade level in reading. The study used two research-based interventions: Read 180 in the school setting and Fast ForWord in the out of the school setting. The study conducted in a large midwest school district in the United States compared the reading growth of five students who received Read 180 at school and Fast ForWord after-school for five weeks during the spring term of the school year with a control group of five students who only received Read 180 during the school day. The analysis of the study data revealed no positive effect of extended intervention time on reading growth for middle school students, performing below grade-level in reading. Overall, the intervention group scored below the control group on the Measure of Academic Progress (MAP) used to assess the outcomes at the end of the study. The three sixth grade intervention students scored 67 percentage points, and the two eighth grade intervention students scored eight percentage points below the control group. There are no clear indications as to the factors that may explain the obtained results.

Chapter One

General Problem/Issue

Teachers today are faced with a dramatic change in the variety of student backgrounds and their lack of mastery of academic skills. Students from all ethnicities often enter school under-developed in foundational reading skills. “These children have weaknesses in both the broad oral language knowledge that supports reading comprehension and in the phonological and print-related knowledge that is required in learning to read words” (Foorman & Torgesen, 2001, p. 207).

As they grow to become secondary students, they have significant challenges in the mastery of the necessary skills to become fluent, proficient readers. As reported by Rathvon (2008), secondary teachers spend a great deal of time trying to differentiate their class instruction, so these students are successful learners.

As a teacher, I have experienced the struggle of middle-level classroom teachers who employ creative, individualized interventions and differentiated instruction to narrow the achievement gap of students below grade-level in reading. I have seen and felt tremendous concern and frustration with the lack of progress to achieve grade-level reading skills in students.

My classroom of middle school students was identified by the MAP standardized test as low achievers in reading or math. Students came to my classroom one period a day to receive basic skill instruction in reading or math. My full-time para-professional was also a licensed teacher. Based on the weakest MAP score of each student they were divided into groups to receive instruction in reading or math basic skills. I witnessed and heard of their embarrassment and reluctance to enter my classroom. “I hate school! There

is NO point in this!” was their common complaint. Their academic struggles had been chasing them since early elementary school. The school district invested heavily in resources, personnel, best practice curriculum and instruction to provide impactful interventions to remediate the partially proficient basic skills of these students. However, the depth of missing skills was too much to recover in a one-hour school intervention. The teenage students in my class were discouraged and convinced they would never be successful in school. They were ashamed and humiliated by placement in yet another special reading or math class that separated them from their peer group. After six or more years of an academic struggle, these middle school teens expressed tearful concern about their futures. Parents were equally frightened and bewildered by the constant academic struggle of their children. They often avoided contact with their child’s teachers because they felt it was hopeless. Most often, the parents also lacked the necessary academic skills to be able to help their teen with school work at home.

I left my school most nights wondering what could be done differently to change this paradigm? It was apparent to me that the school was doing all it could with the time and resources it had to improve student outcomes. The lack of after-school resources to assist with student preparation for school the next day worried them greatly. I wondered, “What can all of us as the stakeholders in this system do differently? Clearly, there must be pragmatic solutions to ensure academic success for these students?” I did not feel educators could work harder, but perhaps we could work smarter?

In 2011, I resigned my position as a public-school teacher and began a nonprofit organization called the Legacy Children’s Foundation (LCF). It was time for me to explore what I could contribute to solving this troubling problem for low SES students.

LCF was created to be a free after-school resource for low SES students who are performing poorly in school and may have demonstrated deficiencies in reading or math. The mission statement of LCF is to assist diverse teens in their quest to achieve a high school diploma. It was developed to be an independent partner with the local school district to help students develop proficient, basic skills and complete high school.

Any student in grade six through twelve can qualify for LCF if they meet three of the four following criteria:

- Receive free or reduced meals at school
- Currently performing under a 2.0 GPA
- Current MAP score under 50% in reading or math
- An extenuating circumstance outside of school that is impairing their school success

Local university students who aspire to become licensed secondary teachers are employed to work with LCF students four nights a week at five homework locations and private homes throughout our community. During the summer months, basic skill instruction is provided by licensed teachers at the LCF headquarters for students below 50% on the most recent MAP reading or math assessment.

Experiences with this subgroup of students, parents, and the school system led me to think about how can reading instruction be changed to show documented progress for this at-risk population of students? I will be drilling into this broad question to understand better the best practice differentiation methods for efficient reading growth for low socio-economic teens, who are not proficient in reading.

Subjects and Settings

Description of Subjects. Participants in this study will be selected from the population of sixth through eighth grade, in an upper Midwest middle school who were enrolled in the school's *Read 180* intervention class. The student population (K-12) is approximately 11,000 students. Within the 6-12th grade population there are 5800 students: 4400 are Caucasian, 1400 are non-Caucasian (53% African-American) 1650 receive free and reduced lunch, 980 minority students are not proficient in English/Language Arts.

Selection Criteria. Through a proportionately stratified sampling process, ten students were selected: six in sixth grade and four in eighth grade. The school district identified these students for *Read 180* in the fall. As seen in Table 1 below, the intervention group consisted of three sixth and two eighth grade students in *Read 180* and LCF. The control group members were three sixth and two eighth students who were in *Read 180* but not in LCF. Students were equally selected by gender and grade.

Table 1

Student Group Membership

CONTROL Students	Grade	Gender	INTERVENTION Students	Grade	Gender
1	6	F	1a	6	F
2	6	M	2a	6	M
3	6	M	3a	6	M
A	8	F	A1	8	F
B	8	F	B1	8	F

Description of Setting. This study took place in an upper Midwestern city with a population of approximately 118,000 (United States Census Bureau, 2015). The population is composed of approximately 89% Caucasian, 2% Hispanic, 3%, Asian, 1.4% American Indian, 2.7% Black, and 2% reporting two or more races. 15% of the population is living at or below the national poverty level, and 9% speak English as a second language (United States Census Bureau, 2015). All students received Read 180 instruction during their regular school day at their middle school location. The intervention group received additional reading instruction after school at the central location of LCF.

Informed Consent. Permission was obtained from the Institutional Review Board (IRB) at Minnesota State University, the school district, participants and parents to conduct this study. The school district's IRB procedure was followed to obtain permission to conduct research. Permission was received from the Assistant

Superintendent of Instruction and the building principal at the school where the research was conducted.

Protection of human subjects participating in the research was assured.

Participants along with their parents were informed of the research, any procedures involved in the research and any procedures required by the participant, including disclosure of risks or benefits. Confidentiality was protected using pseudonyms without identifying information. The choice to participate or withdraw at any time was outlined both verbally and in writing.

Review of Literature

Students performing below-grade level in our schools and without academic resources after school is a troubling challenge for educators and communities today.

Definition of terms. For purposes of this study, the following terms were defined:

- **Achievement gap:** refers to any significant and persistent disparity in academic performance or educational attainment between different groups of students, such as white students and minorities (The Glossary of Education Reform, 2017).
- **At-Risk Students:** The term at-risk is often used to describe students or groups of students who are considered to have a higher probability of failing academically or dropping out of school (The Glossary of Education Reform, 2017).
- **Differentiation:** Refers to a wide variety of teaching techniques and lesson adaptations that educators use to instruct a diverse group of students, with diverse learning needs, in the same course, classroom, or learning environment (The Glossary of Education Reform, 2017).

- Free or Reduced School Meals: The National School Lunch Program is a federally assisted meal program operating in public and nonprofit private schools and residential child care institutions. It provides nutritionally balanced, low-cost or free lunches to children each school day (U.S. Department of Agriculture, 2017). (Appendix C)
- OST: Out of School Time is time children spend out of school such as before, after, during vacations and summer months (Paluta, Lower, Anderson-Butcher, Gibson & Iachini, 2015).
- Phonological Awareness: Is the ability to recognize and work with sounds in spoken language. (Understood, 2017).
- Proficient Reader: Students reaching this level have demonstrated competency over challenging subject matter, including subject-matter knowledge, application of such knowledge to real-world situations, and analytical skills appropriate to the subject matter (National Center for Educational Statistics, 2017).
- Socioeconomic status (SES): Is the social standing or class of an individual or group. It is often measured as a combination of education, income, and occupation (American Psychological Association, 2017).

Body of the Review. Proficient reading skills provide the foundational base for the academic success of all students. All school subjects require students to have the capacity and comprehension to read at the grade level of the course. Traditional reading instruction begins as soon as a child enters school in Pre-school or Kindergarten. Reading instruction continues through grade three. A transition from learning to read to reading to learn usually takes place in grade four. Regardless of a student's background or age, the

elements of effective reading instruction are the same. According to Foorman and Torgesen (2001), effective reading instruction includes phonological awareness, phonemic decoding skills, fluency, word recognition and text processing, construction of meaning, vocabulary, spelling, and writing. Students most at-risk need intense, thorough support that is provided in a small group or one-on-one setting. Out of school time (OST) can provide direct, personalized instruction that can have a positive effect on reading achievement for low performing teen readers (Sylvan Research Institute, 2014). OST offers students a chance to receive relaxed instruction in a setting away from structured time, substantial classroom distractions and peer pressure that may affect skill mastery for students. Durlak and Weissberg (2007) suggest that after-school programs have a positive effect on a student's school attitude, motivation, and academic performance.

In the research on the effectiveness of the ratio between the teacher and the number of students he/she is teaching, the research-based evidence is not always clear. Many studies indicated a frustration in not being able to accurately measure the effects of this ratio because of a lack of attendance by the students in the test group. However, Lauer et al. (2006) indicate in their research results a positive academic effect on a low-income student in a setting with a smaller number of students that provided an opportunity for individualized or small group instruction. "OST programs that provide one-on-one tutoring for at-risk students have positive effects on student achievement in reading. OST programs that have reading improvement as a goal should provide individual tutoring of students" (2006, p.308). OST programs can include direct 1:1 academic tutoring or specific instruction in basic skills such as reading and math. Other OST activities can include social events, hobbies, life-skill building and personal health

classes. OST programs should be tailored to meet the needs and interests of the students who need a place to make positive use of out of the school time.

Inviting adolescent students to be engaged and participate in the process of developing a reading intervention plan will according to Brozo (2006) result in the students feeling shared ownership for their reading growth and academic success. This approach helps students think “metacognitively and critically about their own educational experiences and feel invested in their own learning” (p. 417). Without the student’s input and engagement, there may be a diminished degree of success with the literacy intervention the school team has developed.

The self-efficacy of the student at this older age is also an essential consideration in substantial gains in reading skills. “If academic literacy instruction is to be effective, it must address issues of self-efficacy and engagement” (Alvermann, 2002, p. 189). Alvermann also reports that teens want to be actively engaged and involved in their learning (2002). Reading materials that are used for adolescent instruction should be of high interest and connected to the background experiences of the student. Creatively supporting student mistakes as opportunities to grow will help the student gain resiliency and motivation to stay engaged in the learning process. Instruction that focuses on the effort of the student rather than on the performance may help to create a long-term desire within the student to keep working to understand, apply and enjoy reading.

A fundamental aim of reading instruction for low socio-economic students (SES) below grade-level in secondary school is to accelerate the student’s progress to close the achievement gap between their current reading level and the grade-level expectation (Vaugh et al., 2009). Content area instruction also suffers considerably because of the

lack of proficient reading skills of these middle and high school students (Alvermann, 2002).

Research by Kamil et al. (2008) also shows a positive result for adolescents who are given personalized, direct vocabulary and comprehension instruction. Instruction for struggling teenage readers according to Kamil et al. (2008) should first include an assessment of the student's strengths and weaknesses followed by instructional differentiation with consistent individualized or small group instruction using proven interventions that are implemented with integrity. "Research indicates that poor readers learn to read when taught to read and that some approaches to teaching reading are more efficacious than others" (Roberts et al. 2013, p. 21).

What Works Clearinghouse issued a report in 2009 that indicates READ 180 in the areas of comprehension and general reading achievement shows positive results without reservation. READ 180 is a small group reading program that uses a computer program, direct instruction and high-interest literature that is personalized to match a student's reading needs. "Instruction for children who have difficulties learning to read must be more explicit and comprehensive, more intensive, and more supportive than the instruction required by the majority of children" (Foorman & Torgesen, 2001, p. 206). Pedagogy for struggling readers should be delivered in clear language with explicit vocabulary instruction that is within the instructional level of the student. Providing small blocks of information at an instructional pace that matches the student's comfort level will build a climate of support and trust. Heightened awareness and progress monitoring by the teacher in this fertile environment will allow the instruction to be redirected and

extended discussions to occur as necessary. Steady mastery of skills will close the reading gap and build confidence and academic success for the student.

Foorman and Torgesen (2001) indicate that “effective classroom reading instruction with effective small-group and one-on-one reading instruction” will help all students become successful in literacy skills. The intensity of the instruction is elevated for this age group compared to younger students because of the fewer number of years or months left remaining for the student to attend school. Roberts, Vaugh, Fletcher, Stuebing, and Barth (2013) suggest that student outcomes are more significant with the use of smaller groups or an increase in instructional time but only with the use of an evidence-based intervention. Merely adding more time to increase the intensity of an intervention is not enough. The increase in intervention time must be efficiently and effectively used by the teacher and student to see productive progress in the student’s overall reading growth (Roberts et al. 2013).

The fidelity of implementation of any reading intervention is directly connected to student outcomes. Professional development and training are necessary commitments to be made by school districts and educators to engage teachers in the methods actively, pacing, and sequence of skills, assessments, and progress monitoring to ensure the skill gaps for each student are remediated. If the intervention is not implemented as it was developed, it will have minimal impact on a student’s reading growth.

The instructional setting should include discussion and planning on the physical environment for the adolescent reading intervention as well as the attitude and learning atmosphere. Involvement of community human resources, such volunteers, can help to create a collaborative, caring atmosphere that surrounds the student with unexpected

engagement and support from outside regular school personnel. Teachers, leaders, support inside the school, support outside the school are all critical partners in helping to develop the literacy skills of adolescents (Barton & McKay, 2016). “The tendency is for each of these units to work in isolation of each other or be underutilized” (p.171). Barton and McKay (2016) suggested through their study that when these four groups work together “notable” progress can be seen in improved reading and academic outcomes for struggling adolescent learners.

This study will look at the effect of extended reading intervention time after school on middle school students who are below grade level in reading. Evidence-based best practices will be implemented with professional training to use the intervention with integrity.

Chapter Two

Research Question

My passion for better understanding how to effectively close the reading gap with OST for middle school students below grade-level in reading, in collaboration with school interventions led me to develop the following research question:

1. What effect will an additional reading intervention after school have on middle school students, below grade-level in reading?

Methods and Rationale

The study began by retrieving baseline data of students' reading performance. Scholastic Reading Inventory (RI) and the Measure of Academic Progress (MAP) were used as the measuring instruments for this study. They were administered during the student's Read 180 class at school. At the beginning of the study, student's reading placement was determined by the most recent RI on record at the school. A final RI was given to each student at the end of the study. The assessment provided a quick, reliable, and valid look at the reading achievement and growth of individual students. The assessment derived a student's reading achievement percentile rank in comparison to their peers from around the United States.

The RI is research-based and an appropriate assessment to use with the staggered reading achievement of the study group. The RI was chosen as the instrument to retrieve study data because of the ease of administration, and the timely way it can produce an individual, comprehensive review of student reading achievement. The RI reports "student results in a common metric Lexile framework that matches the readability of the text to the reading level of the student. The Lexile scale allows educators to "not only

look at the reading standard for the grade level but the standard for the individual student as well-an understanding that is imperative to facilitating and monitoring reading growth” (Scholastic, 2017). The quick computer-based, individual administration time helps to avoid stress anxiety and fatigue often found in below grade level readers. RI assessments have been favorably reviewed as reliable, valid and efficient by various groups including the National Center on Intensive Intervention, The National Center on Response to Intervention and the National Center on Student Progress Monitoring.

The MAP is a norm-referenced assessment that is consistently used in the local school district. A new shortened version of the assessment allows school personnel to administer specific components of the assessment to re-evaluate student skills. The reading teachers in the local school district often re-assess students using the shortened version of the MAP to verify the results of the RI.

The local school district uses Read 180 as the reading intervention for students who are reading two or more years below grade level. The combination of online and direct instruction using whole group and small group pedagogy for students in elementary through high school make this a very effective intervention for the local school district. “Read 180 was found to have positive effects on comprehension and general literacy achievement, potentially positive effects on reading fluency for adolescent readers” (What Works Clearinghouse, 2016).

Fast ForWord (FF) is an intervention program designed for students below grade level in reading. What Works Clearinghouse (2016) has determined that FF is an evidence-based intervention that has effective outcomes in comprehension and reading fluency for adolescent readers. Pedagogy of FF involves individual, small group, and

whole class strategies. FF is designed as a curriculum supplement using online and direct instruction that systematically calibrates students' progress.

Schedule

This research study was administered during a five-week period. Ten students who fit the study criteria in grades sixth and eighth grade were invited to participate in the study. All ten students received reading instruction using READ 180 in their regular reading class, five days a week in school. Classes met five school days a week for fifty to ninety minutes as determined by the school schedule.

The intervention group of five students received FF instruction after school at LCF. A licensed teacher who received professional training administered and implemented FF. The intervention instructor received professional development and implementation instruction from FF training specialists. The intervention group of five students was a sixth-grade group of three students and the eighth group of two students. Students received forty minutes of FF instruction, four days a week for five weeks. The first week of the study consisted of establishing baseline preassessment data and implementation of FF. The Reading Progress Indicator (RPI) embedded in FF assessed and assigned students to the appropriate instructional level. At the end of week five, all students completed the RI assessment at school to document potential reading growth since the beginning of the study. The MAP assessment was used to substantiate student reading progress as reported on the RI at the end of the study.

Ethical Issues

An ethical issue with the study could be associated with the integrity of the instruction at OST setting. There is a possibility the FF instruction may have weak fidelity implementation because of the more relaxed setting at LCF.

Chapter Three

Data Analysis and Interpretation

Description of Data

The purpose of this study was to determine the effect of extended intervention time on reading growth for five middle school students performing below grade level in reading. Ten students were involved in the study. Five students were in the control group, and five participated in the intervention group. The groups were equal in gender and grade. Data gathered from standardized assessments (MAP and RI) at the beginning of the study provided baseline information for the ten students in the study. At the end of the five-week intervention period, student data was collected again for all ten students. The intervention group of five students completed an initial assessment at the beginning of the intervention period using the RPI to determine the most appropriate placement in the online intervention program, FF. Intervention students met after school, four days a week for forty minutes at a nonprofit organization to complete FF software. Students in the intervention group completed a final RPI assessment at the end of five weeks. The goal was to evaluate the effect of additional out of school time spent on additional reading intervention.

Method of Analysis

Participant Data

With the assistance of middle school reading specialists, ten students were identified as appropriate students for the study. All ten students were identified by school assessments as students below-grade level in reading and received forty-five minutes of Read 180 reading intervention at school five days a week. Five students participated in an

out of school nonprofit program, and five did not. The five nonprofit students in the intervention group met for five weeks, four days a week for forty minutes to complete the FF reading intervention.

The data of the individual students collected at the beginning and end of the study are compared in Table 2 on the following page. Student 1, 2, 3, 1a, 2a, and 3a were in sixth grade. Student 1, 2, and 3 were in the control group. Students 1a, 2a, and 3a were in the intervention group. Student A, B, A1, and B1 were eighth-grade students. Students A and B were in the control group. Students A1 and B1 were in the intervention group. All students took the MAP assessments in the winter of 2017 and spring of 2018. The RI assessment was taken in January and May of 2018 by all students in the study. Students in the intervention group completed the RPI assessments in April and May. All the students were in general education.

The combined data between the eighth-grade control and intervention group in Table 1 shows that both groups improved 17 points on the MAP with eight points higher on the RI for the control group. Each group had one student who showed an increase of nearly twenty points on the RI. Student B in the control group improved eighteen percentage points. Student B1 in the intervention group demonstrated remarkable gains of twenty or more points on both the MAP and *RI* assessments. Student A1 dropped 8 points from winter to spring on the MAP assessment but improved four points on the RI. Three of the four eighth grade students showed improvements on both the MAP and RI between winter and spring assessments. When comparing the combined assessment scores for the two groups, the intervention group scored eight points lower than the control group. Data for the two groups of eighth-grade students shows relatively the same outcomes.

Results from the data of six students in the sixth grade indicate that only fifty-percent of the students made overall reading improvements between winter and spring on the MAP and RI assessment. Two students in the intervention group scored lower while two control group students showed a gain on the MAP during this time frame. Student 2 from the control group made impressive improvements on both tests with an average gain of 26.5 percentile points. Student 3a from the intervention group showed steady gains across both assessments with an average gain of thirteen percentile points. Overall combined results of the sixth-grade students reveal a sixty-two point percentile rank difference on the MAP assessment between the control and intervention groups. The intervention group as a whole scored twenty-two points lower on the MAP assessment in the spring compared to their scores in the winter.

Figure 1 below shows a visual comparison of the student assessment scores. Students 1, 2 and 3a demonstrated steady growth on at least one of the standardized tests as is shown in the table. The scores for student two were consistently low on both assessments. The data for students in the sixth-grade intervention group were inconsistent. Student 3a showed the most improvement and steady growth. Students 1a and 2a bounced below expectations over the course of the school year on both assessments.

Table 2

Student Assessment Results

Student	RI/W'17 % rank	RI/S'18 % rank	Change	MAP W'18 % rank	MAP S'18 % rank	Change
Control 6th						
1	18	28	10	24	19	-5
2	9	33	24	2	31	29
3	39	35	-4	33	49	16
			30			40
Intervention 6th						
1a	24	21	3	29	12	-17
2a	13	12	-1	45	37	-8
3a	25	48	23	26	29	3
			25			22
Control 8th						
A	33	47	14	30	42	12
B	36	54	18	35	40	5
			32			17
Intervention 8th						
A1	30	34	4	55	47	-8
B1	42	62	20	50	75	25
			24			17

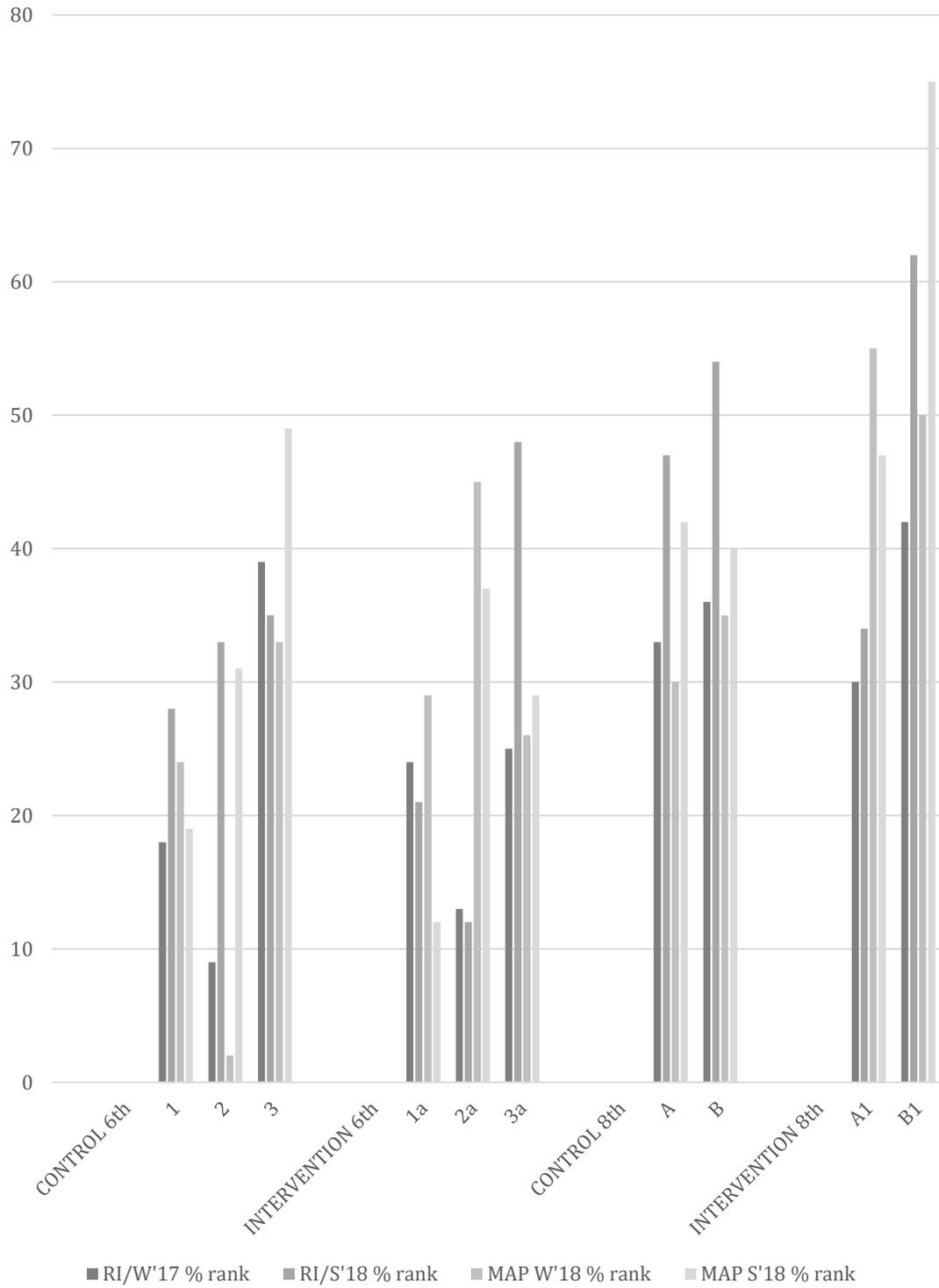


Figure 1. Reading progress of the study group

Research Question

What effect will extended intervention time have on reading growth for middle school students, performing below grade-level in reading?

Data from this study show no significant effect of extended intervention time on the reading growth of struggling middle-level students who are performing below grade level in reading. The average percentile rank gain on the MAP and RI assessment for the control group were 37. The intervention group made an average percentile rank gain of 11 as documented in Table 1. The significantly low scores of students 1a and 2a plummeted the combined scores for the intervention group. Students 3a and B1 in the intervention group were consistently improved over both assessments as can be seen in Figure 2. Two of the five intervention students showed overall positive gains in reading percentile rank between the two assessments. On the other hand, all five control group students made overall positive reading percentile rank gains.

Conclusions

The results of this study may require an additional study to more thoroughly assess the effect of extended intervention time on the reading gains of struggling readers to help them become proficient readers. Dynamics of the study that may have hurt the results could include the time of the year and a lack of academic stamina after school for the younger sixth-grade intervention group. The FF program requires students to concentrate independently during their work. The significant maturity difference between sixth and eighth-grade students may lead the researcher to consider the lack of attention for the younger student after school. Students in the intervention group reported poor motivation to improve reading skills at school. Students also reported test anxiety and

exhaustion from repeated assessments during the school year. A fall or winter study of more than five weeks may produce more conclusive results.

Chapter Four

Action Plan

The results of this action research suggest more time and effort to study the effects of extended intervention time for students below grade level in reading.

Additional time with students using FF after school is a necessary action step to take. I intend to receive further professional development in the implementation and use of FF to ensure it is used with the after-school students in our nonprofit organization with high fidelity.

Students in the after-school nonprofit where I work will continue to be invited and encouraged to use FF as an intervention to strengthen their reading skills. I will offer summer and after-school opportunities to work with students to further review their progress and monitor their reading growth over an extended time of more than five weeks. There may be a substantial improvement in the data of this research if the students work on their reading skills during the summer when they do not have the heavy academic coursework to contend with at the same time.

Motivating older students who struggle in reading is challenging work. Setting specific daily goals for each student as they work in the FF software may provide additional motivation and concentration for the students. A file for each student should be set up to document and record the daily scores of the students as they complete FF exercises. Students will record their scores to see their improvement and engaged in the process of setting new goals to reach. A meaningful reward such as a gift card to the Dairy Queen for reaching a goal may help to create a more focused effort by the students.

Professional development and continued review of current research is an essential commitment for me to make going forward. I will continue to read and review best practice research to learn how to effectively teach reading to struggling middle-level students after-school who are below grade level in reading.

Chapter Five

Plan for Sharing

The results of this study will be shared with the families, reading teachers, administrators and school officials who allowed me to complete the study in the school district and partnered with me to choose students and share data. I will share the study with professional colleagues and additional nonprofit personnel who are working in the field of Education.

Teacher candidates who work at the nonprofit as after-school Academic Coaches will learn and discuss the study through the orientation program they complete before working with students. Educators who are hired as after-school interventionists in the nonprofit will engage in a small group discussion about the study during professional development. Additional students, colleagues, Board members, and stakeholders connected to the after-school work of the nonprofit will be invited to review and discuss the study as well.

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Appendix A
District Approval Form

Fargo Public Schools

AP 4800
Received - FPS
APR - 6 2018 AF 4800

RESEARCH STUDY REQUEST

I hereby request permission to conduct a research study in the Fargo Public School District during the period from April 2018 to May 2018.

TOPIC: The Effect of Extended Intervention Time on Reading Growth for [redacted] Teens performing Below Grade-Level in Reading.

If this request is granted, I agree to abide by Administrative Policy 4800: refer to the FPS web site at www.fargo.k12.nd.us

Signature of Researcher Mary Jean Dahne

Institution of Higher Education MSUM

Signature of Graduate Advisor [Signature]

Date 03/05/2018

In addition to completing the Research Study Request Form, a copy of the following items are attached for review:

- 1. Abstract of the project
- 2. Questionnaire(s) to be used
- 3. Consent letter to be sent to parents

Endorsement: This request is approved disapproved

Building Principal: _____ Date: _____

Associate Superintendent: [Signature] Date: 4/1/18

Both signatures above are required prior to conducting a survey at a Fargo Public School.

Please **print** your name and the mailing address where you want this form returned:

Name: Mary Jean Dahne
Street Address: 3425 1st St N
City, State & Zip: Fargo ND 58102

Appendix B
Parental Permission

Parent/Student Consent Form

Participation in Research

Title: The Effect of Extended Intervention Time on Reading Growth for middle school students performing below Grade-Level in Reading

Purpose: The purpose of this research is to determine the effect of additional intervention time on student reading achievement.

Study Information: This study will compare student reading achievement between students enrolled in a reading intervention at school with a peer group also in the school reading intervention who receive an additional dose of a second reading intervention after school. Data will be collected by the licensed instructors at both sites according to the protocol of the intervention. The RI assessment will be used by the instructors at the beginning and end of the study. The Investigator will be looking for a change in student reading growth over the course of the study.

Time: The participants will complete this study during their regular class times. This study will take place during the spring of 2018.

Risks: Participation in this study will require students and teachers to attend and engage in the curriculum of the classes. The outcome of the study is unknown.

Benefits: Participation in this study may provide a quicker route to improve the reading skills of older students.

Confidentiality: Participant's identity will not be shared with anyone beyond the co-investigator, Mary Jean Dehne. All individual information will be recorded and tracked under an identification number and not the participant's name.

Participation and withdrawal: Participation in this study is optional. Students can choose not to participate or choose to withdraw at any time without any negative effects on grades, relationship with the instructors, or relationship with Legacy Children's Foundation.

Contact: If you have any questions about the study, you may contact any of these people:

Mary Jean Dehne Ph.D. Co-Investigator Ph. 701.793.7600 of Teaching Email: maryjeandehne@gmail.com Lommen 211C	Ximena P. Suarez-Sousa, Principal Investigator Assistant Professor, School and Learning, College of Education and Minnesota State University Ph. 218.477.2007
Human Services Moorhead	

Any questions about your rights may be directed to Lisa Karch, Ph.D., Chair of the MSUM Institutional Review Board, at 218.477.2699 or by lisa.karch@mnstate.edu. You will be given a copy of this form to keep.

“I have been informed of the study details and understand what participating in the study means. I understand that my child’s identity will be protected and that he/she can choose to stop participating in the study at any time. By signing this form, I agree to allow my child to participate in the study. I am at least 18 years of age or older.”

 Name of Child (Print)

 Signature of Parent/Guardian

 Date



 Signature of Investigator

 Date

Appendix C
Free or Reduced Meal Income Guidelines

Department of Public Instruction
Child Nutrition and Food Distribution Programs

Income Eligibility Guidelines

July 1, 2017 to June 30, 2018

Free Meals – 130 Percent

Reduced Price Meal – 185 Percent

Household Size	Yearly	Monthly	Weekly	Household Size	Yearly	Monthly	Weekly
1	\$15,678	\$1,307	\$302	1	\$22,311	\$1,860	\$430
2	\$21,112	\$1,760	\$406	2	\$30,044	\$2,504	\$578
3	\$26,546	\$2,213	\$511	3	\$37,777	\$3,149	\$727
4	\$31,980	\$2,665	\$615	4	\$45,510	\$3,793	\$876
5	\$37,414	\$3,118	\$720	5	\$53,243	\$4,437	\$1,024
6	\$42,848	\$3,571	\$824	6	\$60,976	\$5,082	\$1,173
7	\$48,282	\$4,024	\$929	7	\$68,709	\$5,726	\$1,322
8	\$53,716	\$4,477	\$1,033	8	\$76,442	\$6,371	\$1,471
For each additional family member, add	\$5,434	\$453	\$105	For each additional family member, add	\$7,733	\$645	\$149