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# Analysis of Pre Test and Post Test Performance of Students in a Learning Center Model at the Elementary School Level

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Analysis of Pre Test and Post Test Performance Levels 1

Analysis of Pre Test and Post Test Performance of Students in a Learning Center Model at the  
Elementary School Level

Marion Schalich

Submitted in Partial Fulfillment of the Requirements for the Degree  
Master of Science in Education

School of Education and Counseling Psychology

Dominican University of California

San Rafael, CA

May 2015

## Analysis of Pre Test and Post Test Performance Levels 2

### Signature Sheet

This thesis, written under the direction of the candidate's thesis advisor and approved by the Chair of the Master's program, has been presented to and accepted by the Faculty of Education in partial fulfillment of the requirements for the degree of Master of Science. The content and research methodologies presented in this work represent the work of the candidate alone.

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May 1, 2015

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Date

## Analysis of Pre Test and Post Test Performance Levels 3

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Abstract

Many students are struggling in school academically. These students do not qualify for additional resources. Typically these students continue to struggle in their classroom, year after year. Additionally, teachers tend to socially promote these students. These students continue to fail because they are lacking foundational skills.

The purpose of this study is to examine the impact of small group instruction using select reading comprehension strategies on student reading achievement comparing Measures of Academic Progress (MAPs) assessments from September 2014 to February 2015. The literature suggests that reading comprehension strategies and phonetic awareness improvements are only noted in small group instruction, grammar needs to be taught explicitly, and teachers need to understand individuals backgrounds and use that knowledge to motivate and encourage their students learning.

This is a teacher action research project. Pretest and posttest quantitative data will be collected and analyzed. The results indicated that approximately 50% of students who received explicated small group instruction in reading comprehension performed higher on their reading section of the MAPs statewide assessment in February 2015.

## Chapter 1 Introduction

I have worked in special education for the passed three years. In those three years I have assessed almost 40 students to see if they qualified for special education services. Of those 40 students, only 18 qualified for special education services and received extra support at school. One of the most difficult aspects of my job is telling the concerned parents of a struggling student that their child does not qualify for special education services. If students did not qualify, our school did not offer serviced for these students. My principal and I began talking to the district leadership about other options and programs that are available that could better support the students at our school. These conversations led to our school developing a Learning Center Model at our school.

### Statement of Problem

Students are struggling in school and are not getting the help that they need to improve academically. Funding for extra curricular activities, such as, art and music programs is limited and yet the general education teachers are expected to teach these subjects. Aide time is shortened or eliminated altogether and the general education teachers are still expected to help support every student's individual needs. This system has set the students and the teachers up to fail.

### Purpose Statement

The purpose of this study was to determine if small group instruction at the students' comprehension levels increased students' test scores. The researcher met with students in a separate classroom for 45 minutes a day. The researcher used three different reading

comprehension programs to determine whether small group instruction at students' individual reading level helped increase their reading comprehension test scores on the MAPs assessments.

### Research Question

What is the effect of small group instruction on students' reading comprehension scores when taking the February 2105 MAPs compared to the September 2014 MAPs assessments that they took at the beginning of the school year?

### Definition of Terms

Small group instruction – a group of 4-7 students receiving explicit instruction in reading comprehension and decoding skills.

Learning Center Model – a “pull out” program for struggling general education students and students with Individualized Educational Plans (IEPs) to receive explicit teaching strategies in reading comprehension and decoding skills.

Measures of Academic Progress (MAPs) assessment – a statewide reading, language, and mathematic assessment that students take three times a year at public schools.

Reading comprehension scores – percentages students receive on the reading section of the MAPs assessment test.

### Theoretical Rationale

Over the years, many theorists have studied how children learn. Some theorists such as, Piaget (Gauvain & Cole, 1993) believed that development cycles formed before learning cycles.

Others, such as James (Gauvain & Cole, 1993), believed that learning and development happened concurrently. Lastly, Koffka's theory (Gauvain & Cole, 1993) believed that as children mature, they are able to comprehend the learning process and as they go through the learning process, it helps them mature.

Vygotsky (Gauvain & Cole, 1993) believed that the difference between each child's learning and development was called the zone of proximal development. He assessed this process by taking two students and testing them to determine their developmental levels. Both students tested at an 8 year old developmental level. These two students were then taught different math strategies. After the lessons, he retested the students. One student was now achieving at a 9 year old level and the other student was achieving at a 12 year old level. This led Vygotsky to believe that there was a difference between developmental level and learning levels. The results of the study indicated that children's learning and developmental levels are interrelated.

### Assumptions

I assume that any student receiving direct small group instruction will benefit academically. I assume that this new Learning Center Model's reading strategies will be helpful and beneficial for my struggling students. I assume that these students are struggling in school because they are "late bloomers" in their development and not because they have a learning disability.

## Background and Need

Fisher and Blachowicz (2005) examined an instructional strategy to help with vocabulary instruction called Word Wizard. Word Wizard divides the vocabulary into three tiers. Tier 1 had words that appeared in everyday life, Tier 2 had words that were high frequency sight words and Tier 3 had words that are low frequency and were not presented all the time.

During the week the students reviewed the words chosen at the beginning of the week, mostly Tier 2 words. Whenever the students encountered them in their daily life, they would add a check mark next to the word. Tutors worked with individual students to identify the words. This strategy made the students successful and they learned 60% of the words that were presented to them. This strategy could be used in a classroom setting as a whole group instruction for teaching vocabulary words to struggling readers.

Reis, McCoach, Coyne, Schreiber, Eckert, and Gubbins (2007) studied the effects of a 12 week reading program on 226 3<sup>rd</sup>-6<sup>th</sup> students in two elementary schools using a reading program called School-Wide Enrichment Model in Reading Framework (SEM-R). The 14 teachers attended a one hour afternoon training on the literacy program. Students were chosen to not only participate in the Reading Program, but also to receive 90 minutes of instruction using the Success for All, program in class. The program uses high interest books that the students can choose independently based on their interests. After selecting a book, the students worked daily on independent reading support. The results of this study showed that all students that participated in the controlled reading program increased their oral reading fluency scores and expressed a better attitude towards reading in their follow up interviews.

Sporer, Brunstein, and Kieschke (2009) determined which reading strategies would be

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effective at 210 elementary schools. In the small intervention groups, students were taught four strategies: questioning, predicting, summarizing, and clarifying. Students demonstrated their knowledge on these four topics by working in small groups, in pairs, and in guided practice lessons. The results of the study showed that students in the reading intervention group received higher scores on post assessments than students who received traditional instruction in the general education classroom.

### Summary

Researchers found three main themes. Teaching struggling readers requires teachers to be knowledgeable about reading comprehension skills and syntax. Teachers need lessons that involve the rules of grammar, phonetics, and comprehension skills. Children are not born knowing these skills they need to be taught them. Secondly, teachers need to understand their students' individual backgrounds and use that knowledge to motivate and encourage their students' learning. Lastly, if classrooms allow it, students learn best in small groups. In small group environment, teachers can learn exactly how each of their students learn, so that they can differentiate instruction for individual students.

## Chapter 2 Review of the Literature

### Introduction

This section was an examination of the research literature on Reading Comprehension Strategies. Information was gathered from academic library searches using online resources. Research information is organized in the following categories: Small Group Instruction, Reading Strategies, and Technology.

### Small Group Instruction

Abbott, Dornbush, Giddings, and Thomas (2012) found that many kindergarteners and 1<sup>st</sup> graders did not have reading readiness skills at their grade level. The purpose of the study was to teach these skills to those struggling students. The study involved 74 students and parents. The researchers assessed students using three different measures: parent survey, baseline assessments, and observational checklist. The parent survey indicated that students who disliked reading were also struggling in reading. The assessments identified students who were struggling in reading and targeted areas for instruction.

The interventions used were: guided reading groups, flashcards for letter recognition and letter sounds, phonetic awareness drills, and visual cues to help with unknown words. The results of these interventions were an increase in overall reading scores and reading readiness. This study was performed in a small, rural area in Illinois with a small sample size. The results of this study showed a positive increase in overall reading for all students involved.

Amendum, Vernon-Feagans, and Ginsberg (2011) focused on the effectiveness of reading intervention to struggling readers using Targeted Reading Intervention (TRI). This study involved seven schools, including 364 kindergarten and 1<sup>st</sup> grade students, from a low socio economic status, in a rural community. This study included a control group and a treatment group of teachers that were taught reading strategies and received ongoing professional development through webcam sessions.

The students took a reading test on their word reading, letter recognition, comprehension, and spelling in the fall and then again in the spring. The results of this test were that struggling students and students at grade level who received the TRI scored higher on the spring reading assessment compared to the control group of struggling students and students at grade level. The results of this study suggest that the struggling students and the students at grade level both benefited from using the TRI program.

Gelzheiser, Scanlon, Vellutino, Hallgren-Flynn, and Schatschneider (2011) examined the importance of creating a comprehension program that also supported individual student needs. Public school teachers separated their 4<sup>th</sup> grade classes into two groups, struggling readers and a control group. The struggling readers received the intervention in the fall and were tested in the spring. The fall intervention students increased reading comprehension and reading accuracy skills compared to the control group students.

Gilbert, Compton, Fuchs, Fuchs, Bouton, Barquero, and Cho (2013) examined the effectiveness of the three tiers of intervention for 649 1<sup>st</sup> graders at the beginning of the year. The team determined which students would receive different tier intervention based on students' progress. Tier 1 intervention involved 78 struggling 1<sup>st</sup> grade students which was delivered in

the classroom by the general education teacher. Tier 2 intervention involved 45 students being pulled out of the classroom for small group instruction by a tutor. Tier 3 intervention involved 24 students and was similar to tier 2 intervention, except it was “one on one” tutoring and was more frequent.

Students who received tier 2 intervention made a substantial progress on word reading than the group receiving tier 1 intervention in the general education classroom. This study also discovered that the students receiving tier 3 intervention, “one on one” tutoring, made similar progress when compared to the students in the tier 2 intervention. This intervention was only offered in first grade for 14 weeks and then stopped. The results of this study showed that by third grade, 39% of students from the tier 1 were reading at grade level range and 40% of students from the tier 2 were reading at grade level range.

In a study by Kinniburgh, and Baxter (2012), researchers examined the effectiveness of the literacy program Question Answer Relationship (QAR), a strategy which helps students comprehend what they just read by using the different types of questions: Right There questions, Think and Search questions, Author and You questions, and On My Own questions. Right There Questions are literal questions that are found right out of the reading. Think and Search Questions are questions where the reader has to gather information together to answer to the question. Author and You questions are questions that use information from the story that can relate to the student. On My Own questions are questions that do not require any information from the story but the students must use their background knowledge to answer the question. These different kinds of questions can help a student understand the story. Results of the study

indicated that students were able to improve their reading comprehension using the QAR comprehension strategy.

Lovett, De Palma, Frijters, Steinbach, Temple, Benson, and Lacerenza (2008) examined 166 2<sup>nd</sup>-8<sup>th</sup> grade students. Of these students, 90 were English as a first language students and 76 were English Language Learners. The students were grouped by reading level ability. They received one hour of intervention 4 to 5 days a week for a total of 105 hours of intervention. The teachers took a two day training course through the Learning Disabilities Research Program and received three more days of training throughout the intervention program. The students were assessed and continuously monitored during the phonologically based reading intervention program. The results showed that both the English as a first language and English Language Learner improved in their overall reading skills.

McCutchen, Gree, Abbott, and Sanders (2009), examined the effects of teachers' knowledge compared to the achievement of struggling students. Teachers took a ten day intervention class that focused on literacy instruction and linguistic knowledge. After researcher observations and review of the students' results, the researchers learned that there is a relationship between teacher knowledge and student learning. Small groups and teacher involvement show positive effects on student's learning. Teachers with deep linguistic knowledge can help prevent reading difficulties, which in turn, help to decrease writing difficulties among students. Teachers need to have knowledge in linguistics to help students learn reading for both struggling and non-struggling students.

Melekoglu and Wilkerson (2013) examined students' motivation to read and its effects on students reading skills. Their premise was students who struggled with reading, usually, had difficulty finding books to read for pleasure at their reading level. The general education teachers

had to deal with behavior problems because students could not comprehend the curriculum, become frustrated and disrupt the class. The study had a total of 45 students from grades four through twelve (10 fourth graders, 14 fifth graders, 12 sixth graders, 3 tenth graders, 5 eleventh graders, and 1 twelfth graders). Students were given a survey questionnaire and some evidence-based assessments that teachers could utilize to improve reading motivation of upper elementary and high school students. The results of this study showed no significant changes in students with disabilities. Students without disabilities that struggled in reading performed better and enjoyed reading with more exposure. More exposure to reading can help teachers plan better lessons incorporating reading for those struggling students.

Pacheco and Goodwin (2013) interviewed 20 7<sup>th</sup> and 8<sup>th</sup> grade students from two middle schools in the Southeastern United States. The purpose of the study was to understand the different strategies middle school readers used during morphology instruction (word structure, meanings of roots and affixes, and how to use morphological problem solving to figure out unknown words) so that teachers can integrate this information in future lessons. The researchers collected data from 20-minute interviews, where students were asked to problem solve 12 morphologically complex words, and then answer follow-up questions about their problem-solving processes. The results showed four strategies when teaching morphological instruction: (1) encouraging chunking into meaningful parts, (2) encouraging students to make connections, (3) teaching morphology in context, and (4) leveraging students' language knowledge.

Pomerantz and Pierce (2013) examined student performance at an urban elementary school, Williams School, where students received low test scores for numerous years. Williams School paired up with Salem State University to figure out the areas of need for reading

comprehension instruction, provided literacy coaches, and changed the teachers teaching instruction by adding professional development strategies. The study examined the effects of educating teachers through professional development trainings, co-teaching, and literacy coaches on students' reading comprehension skills. Williams School has 552 students, 91% come are from low-income families and 78% are English Language Learners. Results indicated that students and teachers faced many challenges. The school, in general, did not have access to reading curricular materials for teachers to use with their students. The teachers themselves did not have the skills to teach reading comprehension strategies. The students' test scores performance increased once teachers had professional development training in the following: teaching reading comprehension strategies, learning how to model these practices, applying strategies, and monitoring the students' progress. This study focused mainly on the teachers teaching strategies and not on the students.

The purpose of the study by Roberts, Vaughn, Fletcher, Stuebing, and Barth (2013) was to examine response based reading intervention for 768 struggling 6<sup>th</sup> grade students over three years. The researchers randomly chose students to be apart of the control group and a part of the intervention group for three years in the fall to receive one year of intervention. This study found that students in the intervention group made more growth than the control group of students, however, by the spring of eighth grade (two years later), there was still a gap between typical developing students and the struggling students who had received the intervention.

Scholin, Haegele, and Burns (2013) examined three 4<sup>th</sup> and 5<sup>th</sup> grade students that were struggling in reading comprehension but that did not struggle with reading fluency. The program used the Read Naturally Program and small group instruction to teach the students numerous

strategies to help understand how to summarize, answer inference questions, and make predictions. The researchers determined the program to be successful since all three of the students were able to graduate from the small group instruction and were placed back in the general education classroom. This program had a very small participant sample group and also indicated that they needed more time to know if the intervention students continued to be successful in the general education classroom for the remainder of the school year.

Stroger, Sontag, and Ziegler (2014) studied the effects of reading intervention strategies being taught in 4<sup>th</sup> grade general education classrooms. After implementing this new strategy, the researchers examined: the effects on the students' self-regulation of their own learning, identifying the main idea, and reading comprehension skills. The study included 3 different groups, 266 students who received regular general education instruction, 286 students who received text reduction work, and 229 students who received the 7-step self-regulation model instruction. Students were randomly assigned to one of the three groups for 11 weeks. After the 11 weeks, students who received the self-regulation instruction had a positive outlook on their learning, had higher standardized reading comprehension test scores, and could identify the main idea more than the students in the other two groups.

The study by Wanzek, Wexler, Vaughn, and Ciullo (2010) was a synthesis of research on 24 different reading interventions for students in grades 4<sup>th</sup>-5<sup>th</sup>. They researched word recognition programs, reading comprehension programs, and vocabulary intervention programs. Their findings showed that reading comprehension intervention groups had the highest success scores before, during, and after regular reading curriculum. There were mixed results on reading

fluency, the word recognition intervention had moderate improvement results, and there was little research on vocabulary intervention programs over their 20 years of study.

### Reading Strategies

Cheek and Ortlieb's (2013) book featured one study that focused on scaffolding children's reading. This classroom intervention involved a teacher working with two 1<sup>st</sup> grade students in a "one on one" situation. In the teacher's experience, students over-relied on only meaning and syntax and did not pay attention to the visual/print information, or over-relied on the visual/print information and ignored the meaning and syntax. After teaching the students helpful strategies to use both the pictures and decoding the words correctly, the student's reading comprehension improved. The researchers suggested that teachers work "one on one" with students to gather information about how to shape their students' reading behaviors based on student performance on the following: reading text, solving problems during reading, and monitoring their attempts. Reading teachers should maintain running records to show evidence that students can begin to balance their uses of information as they attempt to solve problems and monitor their reading. This study, although helpful, requires a lot of "one on one" time with students. These strategies would be beneficial in small group settings or in a "pull-out" program to accompany classroom learning.

Compton-Lilly (2008) wrote an informative article about methods in reading instruction that affect learning. The author introduced responsive teaching that involved recognizing the various differences between individual students in the classroom. The study gave three examples of different students and suggested reading strategies to use for each of the sample students. The study found that the author was able to build reading skills based on the individual student's

background. The author found that children had different interests and attention to those different interests. This finding is critical when working with children who struggle with reading.

Teachers need to be expert observers, need to know their students' interests, and need to be alert to those times that students are making connections between text to self. This article did not provide research-proven methods, but urges teachers to be mindful of the difference types of background knowledge students bring into the classroom. Although it lacks specific strategies, it teaches teachers to be mindful as they approach their students' learning styles.

Mahdavi and Tensfeldt's (2013) research showed the importance of reading comprehension in the low elementary grades, especially, since it has been included as a necessary standard for K-3 grades in the US. The authors indicated that multiple methods should be used to improve comprehension for young students. The study is based on specific comprehension strategies, including peer learning, self-questioning, story grammar, and text structures for lower elementary school age students. This study included special education children, English Language students, and at-risk/RtI (Response to Intervention) students.

Results were reported for each individual strategy. The peer mediated learning showed the improvement of reading comprehension in 1<sup>st</sup> grade with children with special education and children who are at-risk for reading failure. The peer mediated learning also helped build the phonemic awareness and word study abilities of kindergarten children. Results also indicated that using story mapping, vocabulary instruction, and other graphic organizers demonstrated the significant influence of completing graphic organizers as a useful tool for keeping students, especially children with reading difficulties, engaged in the text. Only students who received direct instruction in self-questioning showed improvement with reading comprehension skills.

The results showed that students became most successful when two or more strategies are combined in instruction.

### Technology

Cheung and Slavin (2013) examined the effectiveness of technology on students' reading improvement in school. A total of 20 studies based on about 7,000 students in grades 1<sup>st</sup>-6<sup>th</sup> were involved in the analysis. Technology applications used were, Read, Write & Type and the Lindamood Phoneme Sequence Program, Jostens, Lexia, READ 180, ReadAbout, and Fast ForWord. Students showed improvement with their reading skills using Josten and Lexis, however, the test score improvement was minimal. One of the recommendations of this study, to incorporate small group instruction along with the technology applications, did not produce meaningful positive effect sizes.

### Summary

Findings in the research literature showed that students learn best in a small group environment. One study showed that there was no difference between individual instruction and group instruction. Small group instruction may be preferable to serve more students in a limited time frame. The research also indicated that teachers who get to know their students individually and understand their backgrounds in order to select motivating reading materials based on students' interests. Lastly, another study showed that following group instruction the researchers noticed an increase in students' reading scores as well as an increase in positive behavior in the general education classroom. Findings of previous research indicated that individualized small

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group instruction suggested that students reading test scores will increase if they have the opportunity to receive direct small group instruction in a Learning Center Model.

## Chapter 3 Method

### Research Approach

The research of this study was a review of students' pretest and posttest reading performance of students in a Learning Center Model at the Elementary school level. The researcher reviewed the students' September 2104 and February 2105 MAPs assessment scores and determined whether or not the students reading improved after receiving direct small group instruction.

### Pretest/ Posttest Comparison

The purpose of this study was to determine if small group instruction at students' comprehension levels increased students' test scores. The researcher pulled students into a separate classroom and used three different reading comprehension programs to determine whether small group instruction at students' individual reading level helped increase their reading comprehension test scores on the MAPs assessments from September 2014 to February 2015. This was a teacher action research project. Quantitative data were collected from student work samples to determine if there was noted student improvement in classroom.

### Ethical Standards

This paper adheres to the ethical standards for protection of human subjects of the American Psychological Association (2010). Additionally a research proposal was submitted and reviewed by the researcher's advisor, and was approved.

## Sample and Site

Data were collected from one elementary school, in an affluent area in the San Francisco/North Bay Area from 28 students. The study included the following: one 1<sup>st</sup> grader, seven 2<sup>nd</sup> graders, seven 3<sup>rd</sup> graders, six 4<sup>th</sup> graders, and seven 5<sup>th</sup> graders. Twelve of the twenty-eight students were English Language Learners. Of the twenty-eight students, thirteen were male students and fifteen were female students.

## Access and Permissions

Parents of the participants received a letter of notification that their child's was participating in the Learning Center Model. As part of the researcher's normal instructional process, assessment scores were reviewed and analyzed. The parent of the participants received a copy of their scores of the MAPs assessment from September 2014 and February 2015.

## Data Gathering Procedures

The participants for this study took the statewide testing, MAPs, in September 2104. The participants that had been selected by their teachers, based on their testing scores, received small group instruction in reading comprehension and decoding skills. Participants then took the statewide testing, MAPs, in February 2105.

### Data Analysis Approach

Data were analyzed by creating tables showing comparisons of the twenty-eight general education students receiving small group instruction in a Learning Center Model. Tables compared English Language Learners, time spent in the Learning Center, and gender.

## Chapter 4 Findings

## Description of Site, Individuals, Data

Data were collected from one elementary school, in an affluent area in the San Francisco/North Bay Area. Within the Learning Center there are seven staff members, one general education credentialed teacher, three special education credentialed teachers, and three special education instructional assistances. The data collected were from 28 general education students who received small group instruction in the Learning Center Model since September 2014. These students range from K-5<sup>th</sup> grade. The students took the MAPs state standard assessment in September 2014 and then took it again in February 2015.

## English Language Learners

The following table includes the English Language Learners who received small group instruction in the Learning Center Model since September 2014.

<b>Student Number</b>	<b>Age</b>	<b>Gender</b>	<b>English Language Learner</b>	<b>Grade</b>	<b>Fall 2014 Percentile</b>	<b>Spring 2015 Percentile</b>
1	8	Male	Yes	3 <sup>rd</sup>	21%	38%
2	8	Female	Yes	3 <sup>rd</sup>	1%	2%
3	8	Female	Yes	3 <sup>rd</sup>	3%	2%
4	8	Male	Yes	3 <sup>rd</sup>	42%	62%
5	9	Female	Yes	4 <sup>th</sup>	1%	1%
6	9	Female	Yes	4 <sup>th</sup>	1%	1%
7	9	Female	Yes	4 <sup>th</sup>	15%	9%
8	10	Male	Yes	5 <sup>th</sup>	1%	5%
9	10	Male	Yes	5 <sup>th</sup>	47%	51%
10	10	Male	Yes	5 <sup>th</sup>	72%	69%
11	10	Female	Yes	5 <sup>th</sup>	1%	18%
12	10	Female	Yes	5 <sup>th</sup>	44%	18%

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Of the 28 general education students receiving small group reading comprehension instruction in the Learning Center Model, 12 of the students were English Language Learners. For these English Language Learners, the data showed that 6 students increased their percentages on the MAPs assessment after receiving reading comprehension intervention skills in the Learning Center. Two students showed no growth and 4 students' percentages decreased after Learning Center intervention.

### Time Spent in Learning Center

The following table includes 20 students who received small group instruction in the Learning Center Model since September 2014.

<b>Student Number</b>	<b>Age</b>	<b>Gender</b>	<b>English Language Learner</b>	<b>Grade</b>	<b>Fall 2014 Percentile</b>	<b>Spring 2015 Percentile</b>
1	7	Female	No	2 <sup>nd</sup>	20%	30%
2	7	Female	No	2 <sup>nd</sup>	10%	7%
3	7	Male	No	2 <sup>nd</sup>	4%	1%
4	7	Male	No	2 <sup>nd</sup>	24%	30%
5	7	Female	No	2 <sup>nd</sup>	8%	20%
6	7	Female	No	2 <sup>nd</sup>	8%	7%
7	7	Male	No	2 <sup>nd</sup>	20%	30%
8	9	Female	Yes	4 <sup>th</sup>	1%	1%
9	9	Female	Yes	4 <sup>th</sup>	1%	1%
10	9	Male	No	4 <sup>th</sup>	23%	23%
11	9	Male	No	4 <sup>th</sup>	19%	14%
12	9	Female	Yes	4 <sup>th</sup>	15%	9%
13	9	Female	No	4 <sup>th</sup>	6%	14%
14	10	Male	No	5 <sup>th</sup>	9%	37%
15	10	Male	Yes	5 <sup>th</sup>	1%	5%
16	10	Male	Yes	5 <sup>th</sup>	47%	51%
17	10	Male	Yes	5 <sup>th</sup>	72%	69%
18	10	Female	Yes	5 <sup>th</sup>	1%	18%
19	10	Female	No	5 <sup>th</sup>	58%	64%
20	10	Female	Yes	5 <sup>th</sup>	44%	18%

## Analysis of Pre Test and Post Test Performance Levels 29

Of the 28 general education students receiving small group reading comprehension instruction in the Learning Center Model, 20 of the students received the small group instruction since September 2014, while other students received small group instruction since December 2014. Of the 20 students who received small group instruction since September 2014, the data showed that 10 students increased their percentages on the MAPs assessment after receiving reading comprehension intervention skills in the Learning Center. Three students showed no growth and 7 students' percentages decreased after Learning Center intervention.

### Gender

The following table includes the male and female students who received small group instruction in the Learning Center Model since September 2014.

<b>Student Number</b>	<b>Age</b>	<b>Gender</b>	<b>English Language Learner</b>	<b>Grade</b>	<b>Fall 2014 Percentile</b>	<b>Spring 2015 Percentile</b>
1	5	Male	No	1 <sup>st</sup>	49%	28%
2	7	Male	No	2 <sup>nd</sup>	4%	1%
3	7	Male	No	2 <sup>nd</sup>	24%	30%
4	7	Male	No	2 <sup>nd</sup>	20%	30%
5	8	Male	Yes	3 <sup>rd</sup>	21%	38%
6	8	Male	No	3 <sup>rd</sup>	25%	43%
7	8	Male	Yes	3 <sup>rd</sup>	42%	62%
8	9	Male	No	4 <sup>th</sup>	23%	23%
9	9	Male	No	4 <sup>th</sup>	19%	14%
10	10	Male	No	5 <sup>th</sup>	9%	37%
11	10	Male	Yes	5 <sup>th</sup>	1%	5%
12	10	Male	Yes	5 <sup>th</sup>	47%	51%
13	10	Male	Yes	5 <sup>th</sup>	72%	69%

Analysis of Pre Test and Post Test Performance Levels 30

<b>Student Number</b>	<b>Age</b>	<b>Gender</b>	<b>English Language Learner</b>	<b>Grade</b>	<b>Fall 2014 Percentile</b>	<b>Spring 2015 Percentile</b>
1	7	Female	No	2 <sup>nd</sup>	20%	30%
2	7	Female	No	2 <sup>nd</sup>	10%	7%
3	7	Female	No	2 <sup>nd</sup>	8%	20%
4	7	Female	No	2 <sup>nd</sup>	8%	7%
5	8	Female	No	3 <sup>rd</sup>	16%	1%
6	8	Female	No	3 <sup>rd</sup>	40%	70%
7	8	Female	Yes	3 <sup>rd</sup>	1%	2%
8	8	Female	Yes	3 <sup>rd</sup>	3%	2%
9	9	Female	Yes	4 <sup>th</sup>	1%	1%
10	9	Female	Yes	4 <sup>th</sup>	1%	1%
11	9	Female	Yes	4 <sup>th</sup>	15%	9%
12	9	Female	No	4 <sup>th</sup>	6%	14%
13	10	Female	Yes	5 <sup>th</sup>	1%	18%
14	10	Female	No	5 <sup>th</sup>	58%	64%
15	10	Female	Yes	5 <sup>th</sup>	44%	18%

Of the 28 general education students receiving small group reading comprehension instruction in the Learning Center Model, 13 of the students were male and 15 of the students were females. The data showed that 8 male and 7 female students increased their percentages on the MAPs assessment after receiving reading comprehension intervention skills in the Learning Center. One male student and 2 female students showed no growth and 5 male and 6 female students' percentages decreased after Learning Center intervention.

## Chapter 5 Discussion /Analysis

### Summary of Major Findings

Data indicated that 50% of English Language Learners receiving small group reading comprehension and decoding instruction in the Learning Center model showed improvement as measured by student percentages on the post MAPs assessment in February 2015. Data also indicated that 50% of students who received small group instruction since the beginning of the school year (September 2014) received higher scores on the February 2015 MAPs assessment. Lastly, 62% of male students and 47% of female students received higher scores on their February 2015 MAPs assessment after receiving small group reading comprehension instruction.

### Comparison of Findings to the Literature

The findings in this study were similar to the findings of the literature review. D'Ardenne, Barnes, Hightower, Lamason, Mason, Patterson, and Erikson (2013) examined small group instruction for students working on reading comprehension and reading fluency. The study showed the importance of having books that were culturally diverse, high interest, appealing to boys and girls, aligned with curriculum across the grades, and equally representative of fiction and non-fiction. The results showed that students in the intervention program showed growth on their statewide reading assessments. Similar to that study, Compton-Lilly (2008) suggested that teachers need to focus on individual student backgrounds and use those different interests to help children who struggle with reading. Biggart, Kerr, O'Hare, and Connolly (2013) studies also showed improvement on students' behavior in the general education classroom after receiving small group, structured, reading intervention instruction after school.

The literature suggested that direct small group instruction in grammar that is based on students' interests improves students' reading skills. Approximately 50% of the students in this study, that received small group reading decoding and comprehension instruction in the Learning Center Model increased their reading performance levels on the February 2015 MAPs assessments.

#### Limitations/Gaps in the Research

The limitation in this study was that the study was only given at one school. This study only used one Learning Center Model and had a limited sample of students involved.

The study also included students that had previously had been assessed for special education services but did not qualify based on IQs. These students have IQs in the 80s and do not qualify for Special Education services because they are working at their potential. Students that qualify for Special Education services show a discrepancy between their IQ and their education performance levels. This might explain why some of the students' scores did not improve because they are working at their potential.

Lastly, the pre and posttest assessments are different because MAPs progresses throughout the year. The pretest is assessing the student's knowledge of the previous grade and then progresses based on what the students should learn by the time of the next assessment period. For example, a 3<sup>rd</sup> grade student in September 2014 on the MAPs assessment period is being compared to other 3.1 (3<sup>rd</sup> grade, 1<sup>st</sup> month of school) students. During the February 2015 MAPs assessment period, that same 3<sup>rd</sup> grade student is being compared to students at a 3.6 (3<sup>rd</sup> grade, 6<sup>th</sup> months of school).

### Implications for Future Research

Students should take an assessment that is the exact same pre and posttest to accurately show their growth. The researchers should also use an assessment that assesses students at their individual reading level not the grade level the students are currently in. This will allow the researcher to truly study the individual student's growth after receiving the intervention. Lastly, the researchers should take into account students who have previously been assessed for Special Educational services and are working at their potential and focusing on a different intervention for those students.

### Overall Significance of the Study

The purpose of this study was to provide struggling students who do not qualify for Special Education services a resource at school to help them become more successful in reading. The data showed that approximately 50% of the students that are receiving small group reading comprehension instruction in the Learning Center Model are receiving higher testing scores on the MAPs assessment. Teaching students explicit reading decoding and reading comprehension skills in a small group setting, helps students improve on their reading comprehension statewide assessments.

### About the Author

My name is Marion Schalich and I am a Resource Specialist. I have been working at my school for the past two years. During my tenure, I have been working with the staff and administration to develop a program to benefit students who are working below grade level,

students with special needs, English Language Learners, and struggling students that do not qualify for Special Education services. With this goal in mind, I worked with a team of teachers, to developed a Learning Center Model at the school site.

The Learning Center supports both special education and general education students in a fluid manner on a daily basis. The concept of the Learning Center is to enable special education and general education staff (certificated and classified) to work together in order to provide targeted instructional support to students who have not mastered core academic skills and are performing below grade level. Special education students, English Language Learners, and general education students would be taught in designated, small group Learning Center classrooms. Each session would be scheduled for 45-minute sessions throughout the day. There are approximately 30 special education students and 70 Response to Intervention (RtI) students who would have never received this level of regular small group support in the past with a student-teacher ratio of 6:1! This Learning Center program will allow more struggling students to receive small group instruction at their academic level and will help them become more successful at school.

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