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The Effect of Intensive Reading Intervention on California State Testing Scores in a Small Rural Middle School

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The Effect of Intensive Reading Intervention on California State Testing Scores in a Small Rural
Middle School

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Abstract

This study evaluated the effectiveness of reading intervention on California Standardized Test (CST) scores that was implemented in a rural community in Northern California. The study addressed the challenge of meeting the objective of increasing student performance in English language arts on the CST. Investigating whether or not there was a significant relationship between students receiving the intensive intervention and positive academic growth as it is measured on the CST is important for future implications of intervention programs at this site. The literature review focused on the process of adolescents acquiring literacy, differences in achievement within poor and rural communities, and effective intervention strategies. A new intervention curriculum was adopted for struggling students and this study focused on the effectiveness. The site is a small, rural and economically disadvantaged middle school. This study did not find significance between the intervention and an increase in the CST scores of students who were enrolled in the intervention.

Introduction

Success in education can be measured by many means, but the determining factor that leads to federal funding as well as perceived student achievement is standardized testing. School districts across the country are held to a level of proficient achievement, which for some, continues to grow at a faster rate than the measured success of the students. Currently, proficiency levels in English language arts (ELA) in California are measured through California Standardized Test (CST). Through implementation of The No Child Left Behind (NCLB) Act of 2001, four key principles of action have been set forth within the country as well as the school district of study: stronger accountability for results; greater flexibility and local control for states, school districts and schools' in the use of federal funds; enhanced parental choice for parents of children from disadvantaged backgrounds; and focusing on what works, emphasizing teaching methods that have been demonstrated to be effective. This study was implemented with a focus on utilizing teaching methods that have been proven to be effective. When students are not meeting the standard of proficiency expected by the State of California, intervention methods must be enacted to help to raise test scores. More importantly, what counts the most is decreasing the achievement gap between those who are meeting the expected outcomes and those who are not. In this context, reading intervention at the secondary level is a much studied and discussed topic among education experts. It is because of the ever rising expectations of standardized success of students and teachers that this study has been implemented.

Secondary students who fail to meet the standards in English language arts are an important focus group because intervention methods are used to increase proficiency levels and become paramount for the success of each student. Consequently, testing the effectiveness of reading intervention on CST scores was implemented in a rural community in Northern

California. There are 292 students at the school site. In 2011-2012 only 48% of the students in eighth grade were scoring proficient or above on the CST in ELA. At the site in which this study was implemented, the large number of students who were not meeting the standards for ELA that are measured by the CST were placed in intensive intervention classes. The site administrators struggle with meeting proficiency levels set by the state and is in Program Improvement Year 5+. As a result, the site has been reviewed by the State and has developed a plan for how to increase the number of students testing proficient on the CST; the District refers to the plan as the Pivot Plan. In order to remain in compliance with the Pivot Plan, mandated by the State and developed by an outside consulting firm, the site has recently adopted an intensive reading intervention curriculum designed to improve literacy not only for English language learners, but also the lowest performing students at a secondary level.

Background and Need

For years American education policy makers have been focused on improving the literacy of elementary school students; however, advocates for adolescent literacy understand that if students are to become prepared for college, work and citizenship the focus of new policies also need to include adolescent proficiency (Heller & Greenleaf, 2007). Educators are now being forced to reconsider the literacy levels of graduating seniors and within that reconsideration they need to ensure that each and every student gets beyond basic literacy skills (Biancarosa & Snow, 2006). Ensuring that all students have achieved high levels of literacy instruction enables students to develop knowledge and skills necessary to succeed in life after high school (Heller & Greenleaf, 2007). In typical high-poverty schools such as the one in which this study took place approximately half of incoming ninth-grade students read at a sixth-or seventh-grade level and possibly even below that (Heller & Greenleaf, 2007, p. 3). This current study is important

because it will examine current reading and writing instructional practices and how those practices will affect the success of the students within the study.

There were about seventy students across grades 6-8 in the school site of study who were receiving the intensive intervention for language arts. This study focused on only one group of students receiving the intervention due to different teaching methods of the three teachers leading the program. Although all of the students placed in intervention classes have scored basic (300-349) to below basic (266-299) some students have scored far below basic (150-265) in English language arts as is measured on the CST. The school designed the enrollment into the intervention program by first assessing student need in accordance to CST scores then; by teacher recommendation. In 2011-2012, 52% of eighth-grade students at the study site were testing below proficient (Anderson, Gratiot, & Kubinec, 2012). However, between the ever present rise in federal targets for proficiency and the slow growth of student achievement, the proficiency gap continues to increase at this site. As a result, the site adopted a secondary reading intervention curriculum to attempt to meet the needs of this growing population of students that are not meeting proficiency levels as measured by the CST.

The effectiveness of this intervention will be demonstrated by accelerated improvement on the CST. Accelerated improvement will be seen as a one-two year growth in academic achievement on the ELA portion of the test. The teachers received one day of professional development training regarding proper implementation of the intensive reading curriculum. Important to note is that studies focusing on the success of intervention at the middle school level repeatedly highlighted the importance of professional development and the connection to success with the intervention program. The school site integrated the intensive reading program into the schedule based on the positive results from comparative schools within the county of study. The

goal of the intervention program is to measure an accelerated growth span on the ELA portion of the CST for each student enrolled in the program.

The curriculum that was adopted to decrease the gap in achievement is based on a strategic instructional model. This type of literacy instruction emphasizes modeling and providing students with flexible routines that ultimately help to improve their ability to comprehend and monitor their own comprehension (Snow & Biancarosa, 2003, p. 14). This chosen curriculum is structured to focus on the best practices of literacy instruction. Best practices include but are not limited to explicit instruction in: building robust vocabulary, building strategies for comprehension, developing phonemic awareness, structuring supports for English learners, implementing direct instruction, building writing power, instructing spelling, decoding, fluency, and administering comprehensive and responsive assessments. These practices, when put together, should accelerate literacy achievement. This program includes elements of the best practices that have been found in current research to be effective for developing secondary students' literacy. The curriculum being used is largely a strategic instructional model with many elements of guided procedures imbedded in each unit of study (Moore, 1983). Using this curriculum to the best of the teachers' abilities at this site should result in growth for the students.

Considering that this is the first year that this curriculum has been used at this site, it is imperative to understand the effects that intensive intervention may have on CST scores. The curriculum is being taught across three grade levels, sixth through eighth. The students are separated by grade level. Each grade-level teacher is instructing a different level of the curriculum. There are about seventy students that will be affected by this strategic instruction model of ELA reading intervention at the site. This group consists of students who range from

one to three grade levels behind as measured on the CST for ELA. These strategically placed groups of students have also been separated by grade level and not necessarily by reading proficiency level, resulting in mixed ability groups ranging from extremely deficient to almost proficient in ELA within each of the intensive intervention classes. The program was implemented as close to the prescribed practice as possible.

Instructional pedagogies that focus on literacy of middle school students needs to remain at the forefront of education reform, and this action research attempts to discover whether a particular intervention method is effective enough to raise standardized test scores.

Statement of Problem

The problem addressed here is that we don't know if the intensive reading and writing intervention is achieving the objective of increasing student performance in ELA achievement. Thus, this study investigates whether there is a statistically significant relationship between students who received the intensive intervention and a positive academic growth as it is measured on the CST. The students who are enrolled in the reading intervention program are placed based on their CST scores of past school years. Success of the intervention is measured by an increased achievement on the ELA portion of CST and will be measured as a one-to-two band growth. These are standardized measurements implemented by the California Department of Education. Bands are as follows: 150 -265 far below basic, 266-299 below basic, 300-349 basic or partial mastery, 350-394 proficient or solid academic performance, 395-600 advanced or superior performance (Snow & Biancarosa, 2003). Success within the intervention program is measured by given assessments; success on the given assessments does not directly correlate to success on the CST. However, if the school site's purpose of imbedding the intervention program is to increase achievement on the CST, then researchers will use the scores as tool to

measure academic growth. Researching the effectiveness of intensive reading intervention will potentially help to refine strategies for teachers at this school site when instructing students towards proficiency in ELA. The study group of students is small, numbering at 20. Certainly the information gathered from this study will help teachers understand how to increase student achievement through secondary reading interventions.

Purpose Statement

The purpose of this study is to determine the effectiveness of the intensive reading and writing intervention being implemented in an eighth-grade classroom in relation to increased CST scores. In order to measure academic growth, scores from CST year 2011-2012 results will be compared to 2012-2013 CST results to determine the scope of the change. The students in the study did not receive intensive intervention for the CST year 2011-2012 but they did receive intervention for the CST year 2012-2013. As this intervention uses a curriculum built upon direct strategic instruction and specific pedagogies that have been studied to be effective, this study will examine the change in achievement from year to year.

Research Questions

This study researched low performing middle school students who participated in the intensive reading intervention program by evaluating growth in ELA achievement as measured on the CST on the 2012-2013 test year. It answered the following question:

Does intensive reading intervention as it is implemented at a small rural school improve achievement on the ELA portion of the CST for secondary students?

Theoretical Rationale

Students who are focusing intensively on reading at their level within their school day will see a growth in comprehension that will manifest into an increased level of achievement that is measured on the CST. These low performing students who receive the intervention will be able to prove that the focused level of instruction is a cause of success as is measured with an increase of CST scores in 2012-2013. The CST exam not only measures achievement of meeting grade level standards, it is the tool in which school wide academic success is measured so attention is focused on the increase of scores. Any growth that is reported on the CST will be considered movement in the right direction toward meeting federal standards of proficiency. The teachers at the site will use the information from this study to coordinate future intervention methods employed at this poor rural school site.

Review of Literature

Adolescent literacy, with adolescent being defined as fourth through twelfth grade, is a topic so widely studied that it is termed as a “hot topic” and has remained in “very hot” status ever since (Cassidy, Ortlieb, & Shettel, 2010/2011). It is compelling to know that most leaders in education agree that there is a problem with adolescent reading achievement (Franzak, 2006). Much of the older information regarding literacy achievement was regarding kindergarten through third grade literacy acquisition. It has only been in the last ten years that researchers have been focusing on adolescent literacy and what it takes to create a truly literate person that will be prepared to function in the literate world of the 21st century. This literature review will focus on the process of adolescents acquiring literacy, the differences in achievement within poor and rural communities, intervention strategies that have been effective, and how this study will contribute to what is already known about adolescent literacy.

Review of Previous Research

Researchers are still formulating practices and studying the effectiveness of programs that will yield the best results for success in increasing student test scores in English language arts.

Approximately eight million young people between fourth and twelfth grade struggle to read at grade level. Some 70% of older readers require some form of remediation. Very few of these older struggling readers need help to read the words on a page; their most common problem is that they are not able to comprehend what they read. (Biancarosa & Snow, 2006, p. 3).

Rycik states that, “In today’s fast paced world, literacy demands are expanding, and they include more reading and writing tasks than at any other time in history” (2008, p. 62). Researchers

agree that adolescent literacy requires scrutiny and much has been written exploring these ideologies.

The process in acquiring literacy for adolescents.

There is a widely known phenomenon of “the fourth grade slump” in which California students take a reading proficiency dive at about the fourth grade (Snow & Biancarosa, 2003). It is the reading instruction after grade four that takes literacy into content based comprehension in which students cannot be expected to excel if reading instruction becomes ineffective; it is at this age that students need to be taught how to comprehend. Content-based comprehension is dependent on the student being beyond the point of learning how to read and moves into understanding what is being read. Students who are still struggling with comprehension, fluency, and vocabulary will continue to fall behind as instruction continues to move toward concepts of subjects. Content-based reading is needed in order for students to understand a subject area such as science, history, or math. Understanding the structure of the text in each content area is necessary in order for students to develop literal, inferential, and evaluative meanings from the text being read. Students without a strong base in comprehension will continue to struggle as the difficulty of text increases. There are many proven strategies that address the lack of achievement although researchers have not found one specific strategy that is effective; rather it is a combination of many measures that seems to show student improvement.

Comprehension may be a measureable skill that is most lacking for a major portion of adolescents who are failing to show success on standardized tests. Comprehension requires a reader to use many different strategies from inference to contextual knowledge of vocabulary to interact with text (Franzak, 2006). Finding strategies that will help bring struggling adolescent readers up to their current grade level requires the school, teacher and parents to employ skills

that will scaffold learning for these struggling students. Research has shown that there are many strategies that have been employed, and it is a combination of practices that has shown to be most effective. There are fifteen components that have been studied to show that if used will have a positive effect on literacy programs. The fifteen elements include:

(a) explicit comprehension instruction, (b) effective principles embedded in content, (c) motivation and self directed learning, (d) text-based collaborative learning, (e) strategic tutoring, (f) diverse texts, (g) intensive writing, (h) technology, (i) ongoing formative assessment, (j) extended time for literacy, (k) professional development, (l) on going summative assessments of student and programs, (m) teacher teams, (n) leadership, and (o) a comprehensive and coordinated literacy program (Marchand-Martella, Martella, Modderman, Petersen, & Pan, 2013, p. 164).

These recommendations were identified by a panel of five nationally known and respected educational researchers during the Adolescent Literacy Funders Forum (ALFF) at its 2004 annual meeting. The challenges of how best to approach improving adolescent literacy using these recommended strategies is dependent upon how each school develops a comprehensive program that is focused on meeting the needs of the students they serve.

The Effects of Socioeconomic and Sociocultural Status on Adolescent Literacy

Today's adolescents enter school speaking many different languages and coming from many different backgrounds and experiences, so their academic progress differs substantially (Moore, Bean, Birdyshaw, & Rycik, 1999, p. 101). Current research suggests that there is no perfect fit for literacy instruction for all students. Teachers face many complexities when struggling to meet the needs of thirty different styles of learning and individualizing instructional methods becomes overwhelmingly challenging. Low socioeconomic status (SES) is known to

put students at risk for early difficulties (Kieffer, 2010). Consequently, SES is the influence that stalls positive change over time in a student's achievement levels thus suggesting the role of SES in late-emerging difficulties (Kieffer, 2010, p. 484). As students progress in grade level, it is seen that students with low SES are progressing at a much slower rate than their counterparts of students with average SES (Kieffer, 2010). Reform efforts for schools that have high populations of students with low SES that perform below their potential are often seen as prescriptive (Kennedy, 2010). These methods are prescriptive because they offer students highly systematic and explicit instruction in the area of assessed need. The intervention becomes intensive when it is individualized for a single or group of students and the intensity of the program is increased to accelerate student achievement. Intervention and reform policies are not a one-size-fits-all method of improvement and the level commitment of improvement of the community both inside and outside of school is the factor that affects levels of success in schools with high percentage of SES levels.

In Franzak's study he explains how humans have a tendency to speak from their experience when trying to prove a point or tell a story, and teachers are no different. It is that tendency that causes students to be culturally misled, misjudged and even misrepresented within a classroom. For some students, literacy is not valued in their home and denying literacy is one way that they can maintain a hold on their culture (Franzak, 2006). The negative effects of achievement and the lack of understanding of home culture for struggling readers have been able to lead policy change into a direction that focuses on the lack of counter-productive practices (Franzak, 2006). Literacy policies discuss the importance of struggling readers needing models of reading that value their personal identities. Teachers have a responsibility to their students to

consistently evaluate the inherent messages that are being delivered through not only reading instruction but reading content materials. Studies show that ethnic minorities, children from poor families, children attending schools in poor neighborhoods, non-native speakers of English are very likely to have difficulty learning to read, and show persistent poor performance through the middle and secondary school years (Snow & Biancarosa, 2003, p. 7). Biancarosa and Snow explain how it is the responsibility of the school community to provide an academic environment that is rich in culture and the experience of groups unlike their own. If implemented correctly this awareness helps students to be able to see themselves within literature experiences and provides them with a more enriching and realistic foray into becoming a successful reader (Biancarosa & Snow, 2006).

Successful Intervention Strategies

Success is measured by upward movement, the ability to increase one's understanding of content read, vocabulary studied, words decoded, background knowledge built, fluency acquired, and critical thinking mastered. These are the skills that teachers work to build when low performing students are placed in intervention classes at the middle level. The skill of learning to read is quickly shifted to reading to learn (Snow & Biancarosa, 2003). When finding intervention strategies that work, educators and researchers alike are focused on finding common measures both quantitative and qualitative-to evaluate programs that are to be deemed successful (Snow & Biancarosa, 2003).

Reading courses are now common in middle schools, and remedial reading courses are now becoming more common in high schools (Slavin et al., 2008, p. 291). There is little

evidence to provide direction in choosing the most effective reading program as there is little research done regarding the success of individual secondary programs. Slavin et al. (2008) suggest that at the core of all successful reading intervention programs is a strong base of professional development for the staff members utilizing the instructional methods. The preponderance of reading courses found in middle and high schools lead educators to seek out the program with the best evidence of remedial success.

There are many limitations when addressing the concern of finding the most effective reading intervention course to use at a school site. In Slavin et al.'s (2008) evaluation of best intervention reading programs, it was found that it wasn't necessarily the program that determined the success of the student but a variety of methods that produced the desired effects. When Slavin reviewed the reading programs to measure effectiveness he included criteria so that only programs or studies of programs that met all aspects of the criteria were included in his best evidence synthesis. The criteria were:

1. Studies had to have evaluated reading programs for middle and high schools.
2. Studies had to have involved middle and /or high school students in grades 7-12. Middle schools that included 6th grade could also be included.
3. Studies had to have a control group.
4. Studies could have taken place in any country, but the study had to be available in English.
5. Studies had to have used random assignment.
6. Studies had to have provided pretest data.
7. Studies' dependent measures had to have included quantitative measures of reading performance such as standardized reading measures.

8. Studies had to have had a minimum duration of twelve weeks.
9. Studies had to have had at least two teachers and fifteen students in each treatment group (Slavin et al., 2008, p. 292).

This is only a summary of the methods Slavin et al. used to review studies for their research.

Consequently, what Slavin found when reviewing his research was that there are two methods that provided the most data showing effectiveness of a reading program. The first method that was measured to be effective was the use of cooperative learning at the core of the given program. Cooperative learning is when students work in small groups to master and help each other to master the given skill.

Other methods that Slavin et al.'s study found to be effective were programs that helped to improve classroom practices. These program models had mixed-methods, such as: the use of computer managed learning systems, Accelerated Reader, the use of large and small group instruction, cooperative learning and a high emphasis on professional development. Notably consistent in his study was that even though the computer managed learning systems yielded positive effects, they were small unless combined with other evaluated strategies. Slavin concludes in his highly referenced article, "...that what matters for student achievement are approaches that fundamentally change what teachers and students do every day..." (Slavin et al., 2008, p. 309)

Most lacking in all of the studies on effective intervention programs was the mention of teacher effectiveness. Teachers may tend to modify given intervention programs therefore making them either more or less effective (Derdzinski, n.d.). If educators continue to practice instructional strategies that work such as: word study, fluency, vocabulary, comprehension and motivation along with their own style of what they know has been effective within their

classroom we will see improvements in the literacy of struggling adolescent readers (Boardman et al., 2008).

Moving Forward Into Common Core State Standards

Educators are at cross-roads with the current shift from State Standards to the national Common Core State Standards (CCSS) that forty-five states have currently adopted. This shift moves from individual State expectations of student achievement to a national standard of achievement. This shift includes a strong focus on college and career readiness. One of the shifts is in instructing students how to read complex expository texts throughout the middle grades. The use of the CCSS is expected to show an increase in proficiency of academic literacy. Although it is common to notice an implementation drop in scores as the shift in education moves from one set of standards focus to the new CCSS. Students who have been struggling with comprehension will now be introduced to literature that is more focused on academic content, thus providing opportunities to experience and respond to expository text. If teachers are now focused on teaching how good readers read not only narrative text but also expository text, we should see a shift in contextual comprehension (Franzak, 2006). The CCSS allow educators to teach into more depth, which will provide students with clear learning goals and a stronger depth of content knowledge. There are many elements that affect students when acquiring literacy and policy makers continue to explore and imbed best practices in implementing future standards and curriculum.

Summary of Major Themes

The current research suggests that there is an agreement among experts to continue the focus on secondary reading achievement. Researchers agree that there are plenty of studies about *how* to best instruct literacy, but the piece that is lacking through out is *what* strategies or

programs are actually used to effectively increase achievement at the secondary level. Much of the research is focused on finding the students who need the intervention and letting teachers know what can and does work. Consequently, the next step researchers and policy makers agree to focus on is helping teachers to be clear on how to become effective within the classroom by utilizing effective measures of English language arts intervention.

Creating education policy that focuses on the intervention of students who are not meeting standardized levels of success is also a common theme among researchers. Researchers agree that there will be benefits to increased secondary literacy research and also that there *is* enough knowledge about what type of action needs to take place. The consensus seems to be that educators need to get started.

The last common theme that was discovered was effective teacher preparation and the importance of ongoing professional development. According to experts, the above themes are all interdependent. Education is a field that continues to be focused on getting the most success from a given group of individuals by using a limited amount of resources in a given amount of time. Secondary literacy achievement is a commonly researched topic that will only continue to grow as the expectation of standardizing educational success also increases.

How Present Study Will Extend Literature

This study examines the effectiveness of intervention within a poor, rural school. It will examine whether or not the intensive language arts program was effective in achieving higher CST scores for eighth grade students. It will look at past CST scores measuring achievement of the students before the intervention and it will look at their scores after the intervention to consider if this intervention was effective in increasing academic proficiency in ELA. The study will also include scores from a common cohort of students who have not had the intervention. It

will be useful for teachers that use similar programs within their school sites. Most of all the teachers at the site of study will use the information to be able to improve and set goals for the future use of the program.

This study will reveal success and setbacks that prescribed intervention curriculum programs have for secondary students. The successes and setbacks will be helpful for other educators within this rural district to implement similar programs more effectively. This study was conducted in a poor as well as rural school district which will be valuable for other educators who are looking into effective interventions for their specific population of students.

Exploring the effectiveness of secondary reading interventions will present further questions to investigate effectiveness or failure of such programs. The specific intervention methods studied will either prove or disprove that using certain programs work to increase scores or further research will need to be implemented.

Methodology

Secondary schools face the challenge of raising test scores of students who have consistently been achieving below grade level. Currently only 57% of eighth grade students in California are testing proficiently on the ELA portion of the CST (SARC, 2012). Therefore, low achievement on the ELA CST is not just an issue for the site of study, but a state-wide issue as well. At the site of study a new intervention curriculum was adopted and used to for a specific group of students. This study focused on the effectiveness of this curriculum using standardized test scores to measure outcomes after the curriculum was taught in an eighth grade classroom in a small, rural, and economically disadvantaged Northern California 6-8 middle school.

Site and Participants

The site of study is a small, rural, and economically disadvantaged Northern California middle school. The school is located within a school district that has 1,800 students in a rural town of approximately 10,000 people. According to the School Accountability Report Card (SARC) of 2012, 330 students attend the school site. Of these 330 students 55% are white, 30% are Hispanic or Latino, 7% are American Indian, 3% are Asian American/ Pacific Islander, 1% are African American, and 4% did not report ethnicity (SARC, 2012, p. 12).

The school site is currently in Program Improvement (PI) year five + and the school district is in PI year 3. A school in California is defined as PI if it does not meet the Federal Annual Yearly Progress (AYP) with school wide test scores meeting the goal. Therefore, if a school does not meet federal AYP criteria, then it is placed on a federal watch list to monitor improvement. To meet AYP the school needs to meet the requirements of three goals. First of all, 78.4% of students need to score proficient in ELA and 79% of students needs to score

proficient in math on one of three assessments- the CST, the California Modified Assessment (CMA), or the California Alternate Performance Assessment (CAPA). All sub-groups for example, students with disabilities, English learners, and students who are economically disadvantaged, must meet this goal. Secondly, the school must increase the Annual Performance Index (API) to 740 or increase the previous year's score by one point. The API is measured by using annual standardized tests score (CST) to compare school performance across the state. Currently, the API score at the site is 720. Finally, in order to meet the requirements 95% of the school's student body must take the yearly standardized tests. If all the AYP goals are not met for more than two years then the school is designated as PI (SARC, 2012).

Along with being in PI year three this site is mandated to have a plan. The school district hired an outside company to create a district wide plan that is focused on improving test scores for all students. This plan is called the Pivot Plan. The district is mandated by the state to uphold the steps outlined for each focus group and for each school found within the plan. The Pivot Plan called for an intensive reading and writing course to be offered for underperforming students at the middle school level. Thus, the plan was followed at this site by adopting a new curriculum for the purpose of intensively teaching to a specific sub-group at the site. Each grade level has a group of students enrolled in the intensive reading and writing program. Consequently the master schedule at the small school site became tracked; meaning high achieving students, average achieving students, and low achieving students then placed in classes that were based on their achievement levels and stayed within that group throughout the day. Due to the small population of students at the site the core classes became homogenous in terms of achievement. Whether or not the intent was to academically track the students within the master schedule, the Pivot Plan was being implemented.

The school site also faces the challenges related to its socioeconomic profile. The largest sub-group at the site of study is economically disadvantaged with 79% of students falling in this category. In addition, only 14% of students report having parents with college degrees. In 2011-2012, 42% of the students tested proficient on the ELA CST. Of the 42% of proficient students, 47% were white, 38% were economically disadvantaged, 33% were Hispanic/Latino, and 30% were American Indian; these percentages do not add up to 100% as some students are found to be in more than one category. As a subgroup, 0% of English learners tested proficient in 2011-2012. Indeed, 95% of 4+ year English learners tested Far Below Basic or Below Basic on the CST (SARC, 2012). While the students' socioeconomic standing cannot fully explain their performance, it is one factor that should be considered.

The purpose of this study was to compare the year-to-year growth of ELA CST scores in the classroom being studied to determine if the reading intervention resulted in greater year-to-year improvement in performance relative to students who did not participate in the program. Data collected in the study was for the ELA CST year 2011-2012, and 2012-2013. To compare growth, data was also collected for students with similar scores from 2011-12, but who were not in the classroom receiving instruction using the reading intervention curriculum.

There are three teachers, one at each grade level, at the site that implemented the reading intervention program. The researcher is the only teacher who is participating in the present study. The study will include data from twenty-two students from 2012-13 school year who were enrolled in the intervention class and twenty students who were not enrolled in the class. The intervention students will be labeled as Group A throughout this study. The students who are not enrolled in the intervention had CST scores from 2011-12 that were similar to those enrolled in the program. These students, the control group, will be labeled as Group B throughout this

study. These students were not chosen randomly; the researcher attempted to choose students who had similar demographics and CST scores. The researcher will be comparing CST data using the ANCOVA test to establish any significant change in scores. Results from the ANCOVA could show that the intervention had an effect on CST scores or it could show that there was not a statistically significant change. The students who were or did not receive the intervention will be the control group as their scores may or may not change. The researcher is expecting the group of students that is receiving the intensive intervention to have an increase of achievement on the ELA portion of the CST. The researcher will use the results of the ANCOVA test to determine if the intensive reading curriculum was effective in increasing CST test scores for Group A in comparison to Group B.

The data to be used for the study was gathered using the district data base, Data Director. The CST scores that were gathered from Data Director were used as a starting point in order to measure increased achievement within the school year of the students in the intervention program as compared to the students enrolled in the regular class.

Access and Permissions

The researcher obtained written permission from the principal at the school site to access test data of students of students who were not enrolled in the class of study.

Data Gathering

Students were enrolled in the Intensive Intervention Course according to 2011-2012 CST scores. Unfortunately, there were some students who qualified to be in the class but due to the twenty-five student limit for the class they were unable to be enrolled. The students who did not make it into the class were then used as the control group because they were receiving instruction using the standard eighth grade curriculum. The change in proficiency levels

between the two groups was thought to be a valuable comparison when measuring the success of an intervention. Raising CST scores for these students by using the new curriculum and instructional techniques was the goal for the students enrolled in the intervention program.

The students who were enrolled into the class were using Hampton Brown's *Inside Language, Literacy, and Content Level E* curriculum. The school purchased this new curriculum in order to focus on these underachieving students as well as to meet the goals found within the Pivot Plan. The students in the program know how to read, but need intensive work to build academic vocabulary and language, to learn reading strategies, and to develop skill in comprehension, literary analysis, and writing. Important to note is the fact that the intensive curriculum teaches these eighth-grade students using California's content standards for sixth-grade. Each unit within the curriculum was taught using an explicit instructional path which helped the researcher deliver effective instruction while allowing students to receive immediate corrective feedback. The curriculum follows a school wide adopted teaching strategy: Gradual Release of Responsibility for students. This strategy allows the teacher to deliver a best first instruction followed by students trying the newly taught strategy all together, moving into completing the task with a partner and finally completing the task individually. The school site has adopted instructional norms that were aligned to the teaching strategies of this curriculum. The norms are based on best practices of instruction and so is the curriculum. This is the first year that the school site has used this curriculum. Teachers at the site received minimal professional development regarding the proper methods of instruction with the *Inside* curriculum.

The curriculum is taught by unit. Each unit has a genre focus that not only builds reading ability but also writing ability. Students read a series of three to four short stories that focus on

the same genre. They then complete a writing task that focuses on the same genre. Within the reading and writing tasks there are lessons that focus on forms and functions of language. Students are able to put into practice the lessons on language and vocabulary when they are completing the writing tasks. Students within the class were successful writers throughout the year. They completed many written compositions that followed the requirements of the program. Students not only wrote individual pieces but also wrote with partners. All writing assignments were taken to final draft quality. Each day in class there were opportunities for students to write, speak, and listen in order to promote the practice and acquisition of the focus skills found within each unit.

Most importantly, there were many opportunities and lessons for direct vocabulary instruction which lead to development in students' reading, writing, listening and speaking success across all subjects. There is a strong focus on repetition that creates consistency within each unit in the curriculum. The *Inside* program is focused and connected across all lessons within each unit of the curriculum. Each unit is followed by assessment, one that focuses on reading and language and the other is a writing test which includes the grammar lessons along with a timed written assessment. Throughout the year all students met the required proficiency levels of each unit test leading the researcher to believe that the program was having a positive affect on student learning.

According to the publisher's pacing guide each unit should take four weeks. The publisher's pacing guide assumes that there is 120 minutes of instruction set aside each day. At the school site there were only about forty-seven minutes periods allotted for instruction. The researcher had to also teach United States History at grade level for the same group of students because the State also tests in history in the eighth grade. This made the allotted time available

for language arts instruction shorter by forty-seven minutes each day. The minimal allocation of time for intensive reading instruction does not allow for full implementation of the intervention program. The school received the curriculum one month after the 2011-2012 school year had begun; thus, the researcher was only able to instruct through five units of the curriculum before the CST.

At the end of the third quarter of 2011-2012 all students were given a District Progress Assessment which was created by each grade level teacher using the CST released test questions as a foundation. Teachers also used the CST Blueprints which provide access to highly occurring standards found within the state assessment. This district created assessment is intended to provide a snapshot of how students will succeed on the CST. Instruction in the non-intervention classes is focused on the standards that are tested within this particular assessment. However, the intervention class was not taught with the focus of achieving on this particular assessment. Instead, students in the intervention class were focused receiving the assessments within the *Inside* intervention program.

In order to measure whether the intervention program had a positive effect on CST scores the researcher gathered scores from 2010-2011. The independent variable was the intervention class and the dependent variable was the student test scores. The researcher categorized the 2010-2011 test scores into groups labeled: basic, below basic, and far below basic. The researcher also kept the groups' data separated by class placement. Information about present and past student scores was gathered from the district data base called Data Director. Student scores were noted and anonymity was maintained by assigning random number to student scores.

Data Analysis Approach

When all 2011-2012 and 2012-2013 CST data had been gathered and checked for accuracy a table was created to compare growth. Once the student names were not needed, students were randomly assigned a number within a spreadsheet of student scores from 2011-2012 and 2012-2013. Again, the 2011 tests were used to establish comparability of the two groups. The master list of student names was kept in a password-protected computer. The researcher compared 2012-2013 score to 2011-2012 scores by using the ANCOVA test.

The ANCOVA test was used to compare both groups of students' pre-intervention CST achievement to post-intervention CST achievement. The ANCOVA test was used because it accounts for preexisting issues between the two groups of students. Some preexisting issues that it accounts for within the covariates are the mean differences in the 2011-2012 CST scores and the fact that both groups are quasi-experimental group designs and are not random. Therefore, this test offers the best analysis of the overall effectiveness that the intervention had on Group A. The leading question of whether or not there is a potential correlation between academic growth as shown on the CST for students in the intervention program as compared to students not in the program using data from CST test years 2011-2012 and 2012-2013 would be answered using this test. The results of the ANCOVA test were used to determine whether or not there were statistically significant results that determined a correlation between the intervention and an increase in CST scores.

Ethical Standards

This study follows the Ethical Standards in Human Subjects Research of the American Psychological Association (American Psychological Association, 2010). The research project was reviewed and approved by the Dominican University of California Institutional Review Board.

Findings

This study was focused on the test scores between two groups of students; one group received intensive reading intervention for a year and the other group who did not. The dependant variables were the two Groups of underperforming students, the independent variable was that Group A was receiving intensive reading intervention and Group B was not. This study did not find a correlation between the scores of students who were enrolled in the invention as compared to the students who did not receive any reading intervention.

Description of Site and Individuals

The school site of study is a middle school with grades six through eight set in a poor, rural, small Northern California community. The site has a free and reduced lunch rate of 79%. The school has an average of 100 eighth graders each school year. Those students are then separated into an average of four core classes which includes social studies and language arts being taught for two periods a day. The students then go on to a varied schedule which may include band, art, physical education, and a math course. The students who received the intensive language arts intervention had three consecutive periods with the language arts teacher, and they did not get the option of an elective class. However, the control group had a regular schedule which contained an option of an elective class or even band.

The CST test scores from 2011-2012 were used to determine class placement into the intervention sections of language arts for their eighth grade year of 2012-2013. There were 20 students placed into the intervention class. There was only one student whose scores were not used within the study and that is due to the fact that the previous years' scores were not available. The study included 19 eighth grade students all of whom were enrolled in the intensive intervention class. The study also included 17 other eighth grade students all of whom

had tested Basic-Below Basic on the 2011-2012 CST; those scores qualified them for the intervention; however, in the interest of maintaining a small intervention they did not receive the intervention. The researcher determined that the two groups of students were statistically not significant by calculating the ANCOVA test. The researcher compared their 2011-2012 seventh grade CST scores as the concomitant variable (CV). Students were determined eligible for the intervention class if they tested one to two years below grade level as determined on the CST. Students who were deemed proficient according to the CST were not involved in the study. Students who had severe learning disabilities were not enrolled in the intensive intervention class and those who were enrolled in the regular classes were not included in the study. This prevented any outliers that would present.

Description of the Data

A score of 350 on the CST determines that a student is proficient. Table 1 shows the summary of the ANCOVA test with Group A CST 2011-2012 and 2012-2013 mean scores as compared to Group B CST 2011-2012 and 2012-2013 mean scores.

Table 1

Mean CST Performance Scores of Students in Group A and Group B

Sample	Group A	Group B	Total
N	19	18	37
Observed Means	297.9474	299.8889	298.8919
Adjusted Means	298.6504	299.1468	298.8919

The adjusted mean score for Group A is 298.6504 and the adjusted mean score for Group B is 299.1468. The mean scores of the two groups show a 2.26 adjusted mean difference. A

score of 350 is proficient on the CST. Neither group had a large increase in the mean scores from year to year.

Table 2

ANCOVA Summary of Group A and Group B

Source	SS	Df	MS	F	P
Adjusted Means	2.26	1	824	1	1.000000
Adjusted Error	28142.83	34	827.73		
Adjusted Total	28145.1	35			

Table 2 illustrates that there is no statistical difference between the two groups of students as the P value equals ≥ 0.05 . Therefore the testing data from the two groups could not be considered to be statistically significant. The null hypothesis has to be accepted and the result is that there was no change in Group A due to the intensive reading intervention.

Analysis of Themes

The question, “Does intensive reading intervention as it is implemented at a small rural school improve achievement on the ELA portion of the CST for secondary students?” Table 1 illustrated that the groups had mean scores with differences of 2.26. Table 2 illustrates that the null hypothesis has to be accepted because the difference between these two means was not found to be statistically significant and resulted in a P value of ≥ 0.05 , showing a confidence level equaling less than 95%. It appears that the intensive reading program used within this study did not have a significant effect on improving CST scores for Group A. In fact, Group B that received standard instruction in language arts had a higher mean score. However these results are important to not only the school site of study but to the teachers that are implementing this

form of intensive reading and writing intervention. Focusing on intensive intervention could still potentially have an impact on testing scores for students who are not at grade level.

Discussion

The purpose of this study was to find significance in intensive intervention for reading and writing done at the middle school level in relation to improving standardized test scores. As a result of this study it was found that for this eighth-grade rural group of students the intervention did not show significant increases on CST scores. However, there were many limitations to the study that could have caused the scores to be insignificant. In spite of the limitations the results of the study will provide an important contribution to the ongoing discussion of academic intervention at the secondary level. Furthermore, the results of this study will impact the level and style of instruction at the intervention level at this particular school site.

Comparison of Findings with Existing Studies

There are important comparisons to make between this study and the studies in the literature review. Once seen only in remedial or special education programs, reading courses are now common in middle schools (Slavin et al., 2008, p. 291). Even though remedial reading courses may be common it was found through this study for this particular group of students taught by one teacher that there was no effect on CST scores of this group of students. This study focused on the effects of the reading intervention course and its affects on CST scores. When comparing this study to others there are many similarities as well as coinciding limitations. For instance, the lack of success in reading interventions was a common theme in Slavin et al.'s Best Evidence Synthesis study. They report that there are fewer large high-quality reading programs than one would wish (Slavin, 1990, p. 309). Students who enter high school with poor literacy skills face long odds against graduating and going on to post secondary education or satisfying careers (Slavin et al., 2008, p. 290). It is imperative that we find and

utilize programs that show effectiveness for these students to have a chance at post secondary education.

We all hold a stake in the literacy achievement of youth, and if we do not rise to meet this challenge today, we risk our cadre of struggling readers facing a future of sharply diminishing opportunities (Biancarosa & Snow, 2006, p. 31). Many studies focused on the demand of meeting the needs of struggling readers in the middle grades. This study supports the overall idea that they need immediate remediation. However, we must take into consideration “the huge discrepancies in the quality and quantity of the educational experience based on predictable characteristics such as race, class, or geography” (Morrell, 2010, p. 147). The school site of study is rural, 79% of families are receiving free and reduced lunch, and only 14% of students’ parents report to have post secondary educations (SARC, 2012, p. 13). The students’ scores are affected by income, class, and level of education found in the home. Differences in SES are associated with differences in access to a variety of resources that support reading development and academic achievement, and robust relationships exist between SES and reading achievement at the individual and school levels (Kieffer, 2010, p. 484). The results of the study do not show that the intervention program was effective, but one can’t help to question whether their scores could have risen given that they had a higher income, were born to a different class, or that their parents had had the opportunity to attend and finish college.

Limitations of Study

There were some limitations to this study that could have affected the results. The first limitation was the sample size; not only was it small it was not randomized. Although all students were chosen to be in the study based on CST achievement results the fact that they had different teachers and were a year older could have resulted in different scores. The study did

take place in a rural, poor community and the results could have been better if a different population of students were to be used. Due to the size and population of the school site of study results may not help larger more affluent school populations. The school site has a low population of college educated parents which could make it difficult to compare these results with any other group of middle school students. The data studied was only from one grade level of students that were enrolled in the program and results could have been different if all three of the grade levels were used in the study. The intervention program was used for the first time so perhaps there was an implementation gap in achievement. The professional development given for the teachers that were instructing this newly adopted curriculum was minimal. Teachers were only given four hours of professional development to understand how to best implement this brand new curriculum consequently; the lack of time given to the teachers could have affected instructional quality. Due to the many limitations presented throughout the study, it cannot be said that the intervention curriculum that was used would always be ineffective.

Implications for Future Research

Future research could and should be done at the school site of study. This school should continue to examine the effectiveness of grouping students together by ability. As the nation moves into implementing CCSS we should persistently evaluate the achievement gaps within our most challenging populations of students. As the levels of instruction increases in complexity we may see a deeper impact on the students that have already been struggling. Furthermore in the CCSS there are not any standards that are modified to meet the needs of struggling students. Based on this study and as we move forward with massive shifts in education we must continue to evaluate the effectiveness of programs used in middle schools.

The effects of intervention programs in middle schools could be studied in other subject areas such as math, science or history. The results of a multi-subject study done with a given population would support arguments for or against ability level grouping. Should schools grouping students based on ability? What does this do for their belief in academic success? Most importantly, future research examining the effects of multi-subject ability grouping in a poor-rural school should be considered.

This study shows that more research regarding professional development when implementing a new program needs to be considered especially within poor-rural school districts. The data received is important for schools with a given population of students. The data then could be used and compared with schools of like populations and would contribute to thoughtful and effective interventions being instructed throughout our nation.

Overall Significance of the Study

In conclusion, this study has shown that there are many facets to an effective intervention program. In this study it was found that the intervention was not significant in increasing CST scores. As the standards make a shift into the CCSS we know that we have struggling learners who are now being taught language arts at a higher, more complex, and more rigorous levels. To ensure that readers' first steps are sufficiently challenged but also simultaneously facilitative of substantial progress, researchers need to conduct theoretically grounded studies of the interaction between young readers and texts that vary in critical text levels (Hiebert & Mesmer, 2013, p. 49). In these critical moments of increasing the complexity of content we need to ensure that all students are progressing. Given that our nation is at a cross roads and is changing teaching methods to align with CCSS this study further proves that careful consideration for struggling readers remains at the center of educational conversations. The lack of effective interventions

found within the neediest populations of students becomes evident given the information found within this study.

We need to listen to the youths. We need to see them as people who want desperately to succeed, as people who are demonstrating in numerous ways that they are capable and cognitively sophisticated beings. We need a national campaign promoting youths and their talents and telling them that we believe in them, we are proud of them, we hear them, and that we will invest in them...If we provide for autonomy and voice simultaneously we will help to realize this ambitious and worthwhile goal of increasing critical literacy and college access for our most vulnerable populations (Morrell, 2010, p. 149).

This study will expand the ability of the teachers at this school site to consider the tasks necessary to effectively implement intervention programs. The greatest significance that this study provides is an analysis of this district practices' for a struggling middle school students. It will be these students and teachers who will benefit from the information provided. Ultimately, we may see that through deliberate teaching practice underperforming students begin to academically succeed.

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Appendix A

Group A	CST 2011-2012	CST 2012-2013	Group B	CST 2011-2012	CST 2012-2013
A-1	291	316	B-1	332	230
A-2	319	282	B-2	239	238
A-3	315	313	B-3	325	330
A-4	266	293	B-4	329	337
A-5	270	327	B-5	315	348
A-6	270	260	B-6	312	303
A-7	259	275	B-7	240	268
A-8	308	279	B-8	281	334
A-9	322	286	B-9	312	300
A-10	288	256	B-10	329	337
A-11	295	303	B-11	325	306
A-12	308	323	B-12	301	310
A-13	284	293	B-13	295	275
A-14	274	320	B-14	274	296
A-15	329	296	B-15	263	264
A-16	319	272	B-16	319	275
A-17	312	351	B-17	277	320
A-18	319	313	B-18	329	327
A-19	274	303			