# A Special Project <br> Presented to <br> Steve Morelan <br> Heritage University 

# In Partial Fulfillment <br> Of the Requirement for the Degree of Masters of Education 

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Spring 2013

## FACULTY APPROVAL

High-Stakes Testing

Approved for the Faculty

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#### Abstract

The purpose of this project was to collect data on the results of strategies taught to students to increase their state Measurement of Student Progress (MSP) test results. Nine students with Individual Education Plans (IEP) were targeted because they were below grade level, unsuccessful on previous MSP tests and testing behavior indicated fear or stress of testing. Both MSP and Measurement of Student Progress (MAP) test scores were collected. When given strategies specifically taught and practiced in multiple situations the students did increase their test scores.


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## CHAPTER 1

Introduction

## Background for the Project

The increasing controversy over high-stakes testing seems to have become a major topic of conversation. Teachers in public schools are responsible for proctoring these high-stakes tests to their students. Therefore teachers need to know and understand high-stakes testing and strategies that can be incorporated for students to be successful on this type of test. Teachers need to provide students instruction and multiple opportunities to practice answering the types of questions that appear on the test. Students need to learn different strategies for test questions.

High-stakes testing can affect the teachers, the way the teachers teach, the students, the way the students learn, the family, the community and the school overall. High-stakes testing results may be posted in the newspaper and often reported on the local news. When test results are made public; families and community members can read how the local school districts are doing compared to other districts in the area. If one school performs poorly according to the published test scores the families and community members may become angry over the poor test results. Parents and community members want to know what the school district is going to do to increase the test scores.

## Statement of the Problem

The problem with high-stakes testing for special education students begins with a student that is below grade level in some or all-academic areas. The student receives specially designed instruction, usually in a special education pullout class designed to
increase student success in the areas where the student qualifies. Special education classes are designed to teach students at their ability level while high-stakes testing is designed to test the student at grade level with accommodations designed to help decrease the learning gap for special education students. NCLB allows accommodations when special education students are tested,

Harper (2005) because not all LD... students are capable of taking the same tests as other students in their grade...some allowances and accommodations for special needs children, such as large-print test booklets, extended test periods, small groups or one-on-one testing sessions, helping students write their answers, using braille, sign language translators and computers as well as bilingual booklets for math tests. (p.1)

These types of accommodations allow special education students the same access to state tests as their typically developing peers.

State tests can also put stress on teachers that are teaching test preparation strategies at grade level when special education students, who are not able to understand the lessons, are in the classrooms. The curriculums used in special education settings are designed to teach specific skill levels, lessons and strategies. "Strategy instruction is a powerful student-centered approach to teaching that is backed by years of quality research. In fact, strategic approaches to learning new concepts and skills are often what separate good learners from poor ones. Considering that many students with disabilities struggle with developing strategies for learning and remembering on their own, a parent or teacher skilled in introducing this process can
make a world of difference" (Luke, 2010, p. 1). Along with good curriculum and modifications that are put into place when testing special education students this does not guarantee struggling students testing success.

One goal a teacher might have is to fit test practice into the classroom schedule to get the students used to talking about the test. To do that the teachers need to begin preparing the students early in the school year with test taking strategies. Learning testtaking strategies often might be a good way to approach this type of test taking.

Luke (2010) In addition to normal classroom instruction, teachers can lead their special needs students through practice exercises drawn from previous editions of the test. As the National Center for Learning Disabilities explains, "...teachers often use released test items found on state department websites as instructional materials or mock quizzes in order to ensure their students are being exposed to the content and the formats found on state tests. (p3)

With the added exposure to a testing situation the special education students may have the extra learning time that will help them show more success on the formal test.

## Purpose of the Project

The purpose of the project was to; first, research how teaching specific skills and strategies on state testing may benefit special education students. Second to analyze how one group of students has done on previous high-stakes tests and school based tests such as MAPs tests in order to determine which skills and strategies will be used to help increase test success. Third to introduce the chosen skills and strategies that will help increases the student's ability to answer test taking questions on the state test.

Finally to monitor how these students progress throughout the school year on the skills and strategies and when they take the test.

After the students have learned the skills, strategies and information, multiple opportunities to practice the new skills should be provided. The students need to be taught how to apply the new learning and how to transfer it to other subject, which includes test taking. The new learning can become stagnant or forgotten if it is not understood, applied, transferred and practiced.

## Delimitations

This study was conducted in a small town south of Seattle city limits. The school is an elementary school where the student population is predominately white and low to middle class families. There are 32 teachers with the average of 12 year's teaching experience, $56.3 \%$ of teachers have a master's degree and $100 \%$ of teachers are highly qualified teachers. There are 542 students, $55.7 \%$ males and $44.3 \%$ females, $7.3 \%$ of the students are second language learners and $15.4 \%$ of the students are special education students. This school regularly makes adequate yearly progress (AYP) on the high-stakes test in most criterion areas, such as attendance, special education, boys tested, girls tested, different cultures tested; among other areas. Typically this school does not make AYP in the areas of special education and attendance. The school and staff actively work with families to get the students to school on time to decrease the attendance issue and the special education teachers actively work with students to increase student learning and test scores to decrease the number of special education students that do not perform at grade level on high-stakes testing.

## Assumptions

The author assumes that the students are being prepared with knowledge and understanding of test taking strategies and skills both in their general education class and special education classes that will help with their success on the state test. The author also assumes that the students are paying attention and putting in the time and effort required to do well when they are given the opportunity to take the state test. The author also assumes that the students are getting enough sleep and nutritional meals during the test weeks and that parents and siblings are encouraging the student to do their best on the test.

## Research Question

Will teaching students specific skills and strategies increase student ability to show growth on the state test?

## Significance of the Project

There were a large number of special education students who struggled with test taking skills and strategies. The project was chosen to help teachers prepare students with skills and strategies early on in the school year it may reduce the amount of special education students failing the state test. If students are more prepared with the skills and strategies needed to be successful it may change attitudes toward state testing and help increase test performance. Students who are receiving weekly practice, skills and strategies may increase their self-esteem as well as their test performance. The student may be less likely to feel dumb because they are more prepared for the test.

If the results were positive, and the students improved their test score then the skills and strategies intervention group would be repeated with a new set of students the following year. The students who showed partial growth but not an average amount of growth will have the opportunity to repeat the intervention group which will provide them with the extra time necessary to master the skills and strategies. This decision will be based on the individual student on the recommendation of the IEP team.

If the students who are receiving weekly practice, skills and strategies do not improve their test scores then the intervention group will continue for a second year, reteaching the skills and strategies from year one along with adding new skills and strategies. This opportunity allows the students the extra time and opportunities to learn what is needed in order to show growth on the test.

## Procedure

Students were chosen to receive specific skills and strategies in a special education intervention group as they entered the school year because of previous testing taking scores related to school based testing and high-stakes testing. The MAPs test, a computerized version was given three times per year in the fall, winter and spring and the MSP test, a paper and pencil test was given one time per year in the spring.

The author taught skills and strategies (how to answer different types of test questions; multiple choice, short answer questions, and long answer questions, how to predict and make an inference) to a group of special education students. These skills
and strategies were anticipated to help prepare the students with the types of questions that are present on the test.

The author obtained copies of test results from the previous year's Measurement of Student Progress (MSP) state testing for the students as well as the MAPs test score from fall, winter and spring of the previous two years to provide a baseline score for each student. During the intervention year the scores were compared to the baseline score for each student to see if growth had been made.

## Definition of Terms

Adequate Yearly Progress - a measurement defined by the United States federal No Child Left Behind Act that allows the U.S. Department of Education to determine how every public school and school district in the country is performing academically.

Baseline - The data used at the beginning of the intervention to show the students score before intervention.

Benchmark - The student performed an assignment or test at grade level expectations.

High-stakes testing - Tests mandated by NCLB with important consequences such as promotion to the next grade or graduation from high school.

No Child Left Behind - a federal law passed under the George W. Bush administration, which represents legislation that attempts to accomplish standardsbased education reform.

Strategy - A specific skill taught in multiple ways.

## Acronyms

AERA American Educational Research Association
AYP Adequate Yearly Progress
IEP Individualized Education Plan
LD Learning Disabled
MAP Measurement of Academic Progress
MSP Measurement of Student Progress
NWEA Northwest Evaluation Association
NCLB No Child Left Behind
OSPI Office of Superintendent of Public Instruction
WASL Washington Assessment of Student Learning

## Chapter 2

Review of Selected Literature
Introduction
High-stakes testing is at the center of controversy in education today as part of the No Child Left Behind education reform. In the past individual states were allowed to assess students with tests developed within state guidelines. As time has passed there has been talk of a national test that would replace the state assessments. If that does happens it will be another high-stakes test that teachers will be giving students. Until that time comes the students take the state test. This review of the literature covers issues about the state test and how the test is used to determine placement of students in grade-levels. The literature also addresses positive points and negative concerns about the test.

No Child Left Behind "is written so that it requires 100\% of students (including special education students and those from disadvantaged background) within a school to reach the same set of state standards in math and reading by the year 2014" (Lewis, 2011, p.1). That puts the burden for high-test scores on classroom teachers and students. Some teachers and students are able to cope with the demands of the highstakes testing while others are not.

## Cautions Issued About High-Stakes Tests

"Controversies exist among educators and psychologists over the effects of high stakes testing on students, teachers, and parents" (Education, 2011, p. 2). One opinion about state testing is that it can cause students to shut down or become physically ill which may be harmful to students. Harm to the students can mean a number of
different things. In this situation the definition of harm means that the students are stressing out emotionally because of the test and that in some situations after taking the test and not getting good results some students are dropping out of school, not continuing on in school because of the test results. Students either drop out early or walk away without a diploma. The American Educational Research Association (AERA) has developed some recommendations for regulating issues focused around the state test. "The very first recommendation cautions against reaching decisions that affect an individual student's life chances or educational opportunities based on the score of one test alone" (Dunne, 2000, p. 1). This recommendation opens up the conversation about how to assess our students and how much weight should be attached to the state highstakes test scores. If states are going to put so much weight on one test then the expectation of the test needs to be clearly defined so that teachers are teaching the content information and the strategies that the students need to perform well on the test. "There must be alignment between the test and the curriculum. Both the content of the test and the cognitive processes students engage in while taking the test should adequately represent the curriculum" (Dunne, 2000, p. 1).

When the curriculum lines up with the test expectations there can still be other factors that could cause a student to do poorly on the test. Sometimes a student's home life can be a factor on test results. If the student doesn't get enough sleep or proper nutrition before school on a test day it can have a lot to do with how well the student does on a test. If a student feels badly about taking the test, if they did not pass the state test in a previous year or they perceive themselves to be too stupid to pass the
test then test scores may not reflect the student's true ability. Instead the test should be considered just one test score at one moment in time.

The curriculum used to teach the students provides the majority of the students the test taking strategies that will help them be successful when taking state tests, the number of students in class that need the extra support and intervention is typically one or two students. These students need something more than their peers. Extra support can come in the form of test taking strategies. This training can help the student increase confidence in their ability and provide them what they need to answer test questions and perform better on the test. When students are provided instruction that will increase their ability to take tests, along with good teaching and curriculum that is aligned with the assessment chances are that the student can perform at a higher level. The teachers job is to provides quality instruction to the class as a whole, individualize lessons for different learning styles, make accommodations to students who need that attention, make sure the students have a quiet testing environment, and even with all these things in place some students may not do well on the test. The students job is to come to school with a good attitude and prepared to take the test, if a student does not want to do well on the test the student will do poorly.
"Unlike NCLB, IDEA did not require schools to test LD students' academic progress against the same standards as other students, but focused on the specific concerns and the educational needs of each individual student" (Harper, 2005, p.1). In the last few years' states have implemented these types of tests. State leaders expectation that all students should know specific standards by a certain grade level. This may be an unrealistic expectation since there are many different types of learning
styles and student needs. Some special education students do not have the confidence or skills they need to compete with the general education students on state tests. These students are below average students that have to work hard to understand the daily instruction; it takes more time and interventions for the students to catch up. Typically these students have an IEP or are in the process of being evaluated for one. The IEP documents the individual struggles the student has with academics, behavior and communication, which can impact their ability to perform well on any test. These students who perform below grade level in classwork everyday are asked to take the state test to show their level of understanding of the state standards and the curriculum used. When the students are provided with the added test taking strategies and the accommodations that they qualify for it can help the student close the gap and they can be more successful test takers.

## High-Stakes Testing

Teachers and administrators use data collected from high-stakes testing to determine if the classroom instruction and curriculum is teaching the students what they need to know to be successful on the high-stakes state test. If the instruction being provided to the students is aligned with the state test then the students will be more prepared for the test. That doesn't mean that teachers need to teach to the test but they need to provide opportunities for students to learn the types of test questions they will be asked to answer, they will need to know the strategies that will be needed to answer different types of test questions.

The test needs to be given for specific reasons such as; to provide data about how well the curriculum is meeting the needs of the classrooms or how good the strategies being used in the classroom can help the students solve problems in alternate situations but not used to talk about failing schools and failing students. The conversation about the test should be around how well the curriculum is doing the job it is expected to do, conversation can also be directed at the fidelity of the curriculum and whether or not the teacher is following the protocol as intended for maximum results of the curriculum. After the students have learned the skills, strategies and information, multiple opportunities to practice the new skills should be provided. The students need to be taught how to apply the new learning and how to transfer it to other subject, which includes test taking. The new learning can become stagnant or forgotten if it is not understood, applied, transferred and practiced.

In addition to normal classroom instruction, teachers can lead their special needs students through practice exercises drawn from previous editions of the test. As the National Center for Learning Disabilities explains, "...teachers often use released test items found on state department websites as instructional materials or mock quizzes in order to ensure their students are being exposed to the content and the formats found on state tests" (Korcok, 2011, p.1). This type of instruction allows all the students to practice answering the types of test questions they will be required to answer but it provides the special education student with the added benefit of pre-teaching. This strategy teaches the students to understand the vocabulary being used and the types of answers they have to provide to receive a specific score. For some special education students that is all the extra support or intervention that is required to help them become
more successful on a high-stakes test. "The Education Department counters that the majority of the nation's 6.5 million special education students are capable of taking and passing achievement tests" (Harper, 2005, p.2). For the remainder of the students who are not testing at the expected level of success as their grade level peers there needs to be added intervention and strategies that are intentionally taught in different ways so that student has the same opportunity to perform at a higher level on high-stakes state testing.

## No Child Left Behind

No Child Left Behind should help teachers and administrators focus on the dealing with the high-stakes tests that are now given in most states. One opinion about high-stakes testing is that "We've spent all these years believing that we need to address the individual needs of students, but that's been pushed aside somehow" (Harper, 2005, p.1), Donna Parker, president of the Tennessee Association of Special Education Administrators, told the Tennessean. "There could be times when the child's needs would not correlate with the requirements of testing" (Harper, 2005, p.1). Students are at so many different levels of understanding and ability that it could be impossible to find a state test that will fit the testing ability of all students. This problem could be minimized if students are taught specific skills and strategies for the type of test they are required to take. All students need to perform at their highest level of achievement but that does not always happen. Test results show that many special educations students struggle on state tests; this is a problem for teachers and administrators. They are responsible for students test results being at a benchmark level. Low-test scores can set the classroom up for failure, the pressures imposed on
that teacher and classroom can cause stress on the teacher and students to perform at a level that can be impossible for some students to reach. Another concern is that "standardized tests fail to differentiate instruction for different kinds of kids without condemning low-achieving students to boring and unproductive schooling" (NWEA, 2006, p. 308). Students who are below grade level need accommodations in the classroom to learn the information and test-taking strategies. Students also need many opportunities to practice using the new skills so that the skills are imbedded in their mind and easily accessed on test day. Although these two positions are opposite they seem to be fair representation of the way the test is viewed by the people who proctor the test in public schools.

It seems that the people who were willing to discuss this issue either really like the test and think it is the best thing to come to education or they really dislike the test and think it is the worst thing you can do to the students and the teachers. If the test is supposed to only measure student skills then it should probably be considered a negative test but "the goal of using tests is not just to measure performance but also to drive changes in alternative instructional materials, learning models and staff development that can make the shifts in the desired teaching and learning" (NWEA, 2006, p. 305). If the test is used as an instructional tool that is supposed to drive changes in classrooms and increase the learning experiences that the students have when learning then the test should be considered in a positive light.

NWEA (2006) Assessment-driven reform can have a powerful influence on school curriculum and reform, if tests are carefully designed to be consistent with the kinds of learning desired in the classroom and if there is a tight connection
between cognitive learning theory, the curriculum, classroom activities and assessment items. (p. 305)

As teachers it is important to create a balance within the classroom. To provide activities and lessons that will help prepare the students for success on the high stake tests in our states. A balance that will also allow for creativity and learning experiences in the classroom that become part of the students overall strength when faced with new learning or the tests. Students should be prepared because they will encounter these types of testing situations as they progress through school.

## Summary

High-stakes testing is supposed to test actual student skill ability level and help teachers provide learning experiences that will increase student skill levels. Teachers and administrators should take steps to make the learning meaningful and transferrable for the students. Schools should create a learning environment that will help students to be encouraged and positive at school and not become frustrated because they do not understand how to solve the problems they are faced with.

The high-stakes state test is a test that should provide the schools and school districts with data that shows how student's measure up to other students and grade levels in similar situations. The data should be used to help administrators and teachers provide lessons that will increase student skills in areas where the student struggles. As teachers and administrators education is the key to knowing the facts about state testing. This knowledge and understanding can help build a program that will help each student reach individual grade level potential. The students need the
opportunity to learn and understand skills and strategies that can prepare them for the types of questions they will be faced with on state tests.

This literature poses good questions and strategies to be considered by teachers and administrators when preparing students to take state testing. If the reason for the state test is to determine what the student knows or understands based on the curriculum and teaching they receive in school, then the curriculum and teaching should be aligned with the state test. Students should get the proper training to help them succeed on the test. The teachers do not have to teach to the test but it would be best practice to teach the students how to take the test as well as to prepare the students with strategies using past test questions to solve the types of test questions the students will face on the test. This type of preparation is balanced and necessary to help students who are low academically, poor test takers and students who freeze up when any test is given.

## Chapter 3

## Methodology and Treatment of Data

## Introduction

The author created a survey/questionnaire that was given to teachers, parents and students about the amount of stress involved with the high-stakes testing and visited classrooms to observe students preparing for the high-stakes test.

The author informally interviewed a number of different teachers in different school districts to find out what strategies and skills were used to prepare the students for the high-stakes test. The skills and strategies that were most effective were taught to a team of teachers that taught a group of special education students. The teachers taught the curriculum provided for the group and then one day per week provided new skills and strategies, extra practice sessions for the students to solidify the learning and to familiarize the students with the types of questions that would be on the state test.

The author collected copies of test scores from the previous year's state testing in reading and math for the students as well as MAPs test score from fall and spring of the 2010/2011 and the fall and winter test score from the 2011/2012 school year to track student growth and to look at test taking scores to use as a baseline for the new data that was collected.

## Methodology

Test scores from a particular group of students that have been receiving specially designed instruction for the past 5 years were utilized. The first step was to collect past
data on test scores and to keep track of the skills and strategies that were being taught so that new skills and strategies could be built upon that foundation of knowledge. Next was to obtain a baseline score in reading and math. Last was the introduction of new skills and strategies (one at a time), allowing the students to process the information and practice new skills before introducing new strategies.

The groups were kept small and focused during the sessions to increase the chance of student success. The groups are held four times per week, in 45 -minute sessions Monday's through Thursday's from 2:10 pm to $2: 55 \mathrm{pm}$, directly after recess. Three days a week the students get reading or math curriculum provided by the special education teachers and one day a week the students were taught skills and strategies for test taking.

## Participants

The participants in this study were sixth grade students during the 2011/2012 school years. This group was chosen because of the amount of data that had been recorded from third grade through sixth grade. There were six female students and three male students. The students ranged in age from eleven to thirteen years old. These students were resource room students who were tested by the school psychologist and determined to be below grade level in the areas of reading and math. The group was split up into two groups with one special education teacher teaching five students and a Para-professional teaching four students. The students were focused and seemed to want to learn the test taking skills and strategies.

## Instruments

Data gathering devices used in this study were observations, student survey dealing with stress toward high-stake testing, the MAPs test and the Measurement of Student Progress (MSP) test for math. The MAPs test is provided in Washington State, to districts by the Northwest Education Association (NWEA). The test is an online test in reading and math. The students typically take the test in the fall, winter and spring. The test starts the student at their grade level and increases or decreases the complexity of each question based on the student's answer to the questions provided. When completed the test provides a score as well as breaking the results into areas of strength for that student. The test results can also provide a prediction of the student's future test scores.

NWEA (2012) Test and re-test studies have consistently yielded statistically valid correlations between multiple test events for the same student. Most such studies rely on the methodology of having students re-test within several days. NWEA test and re-test studies have typically looked at scores from the same students after a lapse of several months. Despite this methodology (which would have the expected result of lowering the correlation figures) the reliability indices have consistently been above what is considered statistically significant. (p. 6)

The MSP test validity and reliability is based on "how similarly students perform across items measuring similar knowledge and skills ... the test scores from Reading, Mathematics, and Science, as well as the shorter Writing test all exhibit relatively high coefficient alphas suggesting the construct is being measured consistently" (OSPI,

2012, p.140). This test's validity and reliability may also be based on the way the test is scored. These tests, unlike the MAPs test, are subject to human error. Trained professionals score the tests and as long as those professionals adhere to the standards the test is considered to be valid and reliable as a measurement of student progress.

## Design

The MAPs test scores from winter of 2010/2011 school years were used as the pre-test and the MAPs test from winter of 2011/2012 school years were used as the post-test. Throughout the months between the two sets of scores in reading and math the strategies and skills were taught and practiced.

The design of the study was to provide the students with enough time between two sets of tests to learn, practice and master some of the skills and strategies that were being taught. The pre-test was chosen as the winter test from 2010/2011 school year because it was the last test given before the introduction of the intervention period being used in this study. The students also had a school break in-between the two tests so the author expected the student's to come back to school in need of some reteaching at the beginning of the 2012 school year so the winter test was chosen as the post-test. It was one full school year between the pre-test in winter 2011 to post-test in winter 2012 which seemed like enough time to see if the student's would show growth on the test. The MSP test was taken one time during the study. The MSP test was taken during the fifth grade year after the spring MAPs test. Students test results were received in the school office in August of 2011 before the post-test MSP was taken.

## Procedure

The skills and strategies were implemented as accommodations into the student's IEP and parents were notified at the IEP meeting by letter (Appendix A) and at parent night in October 2011 that the student's lessons were being accommodated to see if the change in teaching would positively affect MAPS and MSP test scores. All parents and students with an IEP were surveyed (Appendix B) to see how they felt about taking the test in previous years or in the present year and to see if there was any stress in households as a result of the test.

Students were taught specific skills to help them understand and answer different types of test questions. Students were taught the easiest types of test questions first to build a strong foundation for new learning. Some pre-teaching and ground rules for the intervention group were established so students understood the expectations. Students were taught to read the test questions before answering the questions. The students were also instructed to pay attention, follow the directions for every section, remember the skills and strategies they were taught and finally the students read for comprehension.

The first intervention and question type introduced: Answers that are found directly in the text. The premise behind this type of question is that the answer should be easy to find in the text. The students read the test question first and as the text is read the answer should stand out. Although this concept seemed the easiest it was difficult for the students to determine which piece of text answered the question. The students were instructed to look for text that was similarly stated as in the question.

The students practiced reading, underlining, numbering and answering questions following the same set of directions to find the text that answered the questions. These practice sessions were done at a lower level of reading ability to ensure that the text was not too difficult for the students to read and understand. As the practice became more successful the difficulty of the reading was increased.

The second intervention and question type introduced: Making inferences. The premise of this type of question is that the student will read the question and then makes a guess about the answer based on information read in the text. The students were instructed to read the question, look in the text for a possible answer, and to make an educated guess to answer the question. Part of the answer to an inference question is to have text evidence. When students make an inference a piece of text should be used to justify the answer chosen. This strategy took many hours of instruction and practice.

The third intervention and question type introduced: Making connections with the text. The premise of this type of question is that the student reads the question and makes a connection to the text in some way. These connections can be in multiple ways; text-to-self, text-to-character, text-to-situation or problem, self-to-character, self-to-situation or problem. These types of questions allow the reader to read the text and to make a connection based on the reader's prior knowledge of the subject, personal opinion or personal experiences. The student is relating the text, character or situation to himself or herself based on what they know or think. This concept was somewhat easier for the students to answer because the students can base their answer on personal experiences and prior knowledge. The tricky part is teaching the students to
use the text as part of the evidence in the answer to the question and to remember to answer why or explain the answer using personal experience or prior knowledge.

The fourth intervention and question type introduced: Prediction. The premise of this type of question is that the student's answer the question making a guess about what might happen next or what might happen differently if certain criteria were changed. The important thing to remember is that the prediction needs to be based using text evidence in the answer along with a reason why the predicted outcome is possible. The student's found making predictions very difficult and needed many practice sessions to become successful.

The first type of question the student will face is multiple-choice questions. The students are taught that the best way to answer these types of questions is to eliminate the one or two answer choices that are completely false or that do not pertain to the question at all. A key point in answering this type of question is to quickly eliminate the two wrong choices and spend most of the time focusing on the two answers that may be the correct answer.

The second type of question the student will face is fill-in-the-blank questions. The key to answering this type of question successfully is to know and understand the vocabulary words that are part of the word bank. Students need to be specifically taught vocabulary that goes along with the type of test the students are taking.

The third type of question the student will face is short answer questions. This type of question sometimes requires the students to make inferences, connections,
and/or predictions based on the written piece. These types of questions are usually worth more points when answered because it takes more effort to answer correctly.

The fourth type of question the student will face is essay questions. These types of question ask the student to write the answer out in multiple paragraphs. Students need to have many opportunities to write and edit their work before being faced with these types of test questions.

## Treatment of the Data

The data for this study was collected from the students MAPs test and the student's previous WASL (the state test changed so the previous tests the student had taken was called the WASL) and/or MSP test scores from third and fourth grades. The data was collected and organized by student, averaged and compared between the student's pre and post scores. This study was designed to see how an individual student would increase individual scores after the students received the intervention time and the strategies for solving problems.

## Summary

The intervention time and strategies were designed to help the students become more familiar with test format and questions and answer types. After the students were taught a specific strategy for answering a question they were given multiple opportunities to practice that skill or skills to build up success. Some students were more receptive and put more effort into learning the strategies while some students did not put forth effort.

## Chapter 4

## Analysis of the Data

## Introduction

The increasing controversy over high-stakes testing seems to have recently become a topic of conversation in and around schools. Teachers seem to be a common denominator in all these situations so teachers need to know and understand the criteria for high-stakes testing, the pros and cons for the test and skills and strategies that teachers can teach the students to be more successful on the high-stakes test. Highstakes testing results are posted in the newspaper and often reported on the local news and often community members become angry for the poor test results. This project focused on skills and strategies that can be taught to students.

## Description of the Environment

This study took place in a small town south of Seattle city limits. The school is an elementary school where student population is predominately white and low to middle class families. There are 32 teachers with the average of 12 year's teaching experience, $56.3 \%$ of teachers have a master's degree and 100\% of teachers are highly qualified teachers. This school regularly makes Adequate Yearly Progress (AYP) on the high-stakes test in most criterion areas. Typically this school does not make AYP in the areas of special education and attendance. The school and staff are actively working with families to get the students to school on time. There are a group of special education teachers who are actively working with students to increase student learning and test scores on all tests given by the school including the state test.

## Research Question

Will teaching students specific skills and strategies increase student ability to show growth on the state test?

## Results of the Study

The students took the MAPs math test (Table 1) and MAPs reading test (Table 2) to determine a baseline of scores for each student. These first tests were viewed as a pre-test score and were taken before the project was started. These MAPs tests were taken in the spring of 2011.

The students were provided with interventions, which included specific test taking skills and strategies. These skills and strategies should show an increase of their MAPs test scores after the students took the post-tests, which were taken in winter 2012. The data collected was the increase or decrease of the students MAPs math test score (Table 1) or the MAPs reading test score (Table 2). In these tables if the student score was increased it was indicated by an "I" followed by the number of points the student increased and if the student score was decreased it was indicated by a "D" followed by the number of points the student decreased on the test from spring 2011 to winter 2012.

The MAPs math test data (Table 1) shows an increase in test scores for all students. The total score and average in each column shows that the average score for spring 2011 was 183.56 and for winter 2012 was 195.78 and an average increase of 12.22 points. An increase of 8 points shows one year of test growth. The average student at $6^{\text {th }}$ grade with the average growth of 12.22 indicated that the student's improved more than one and a half year's of improvement during this time period.

Table 1

MAPs Test Math

| Students | Spring 2011 | Winter 2012 | Increase/Decrease |
| :---: | :---: | :---: | :---: |
| S1 | 189 | 212 | 1/23 |
| S2 | 187 | 205 | 1/18 |
| S3 | 178 | 198 | 1/20 |
| S4 | 176 | 187 | 1/11 |
| S5 | 186 | 188 | 1/2 |
| S6 | 187 | 196 | 1/9 |
| S7 | 181 | 187 | 1/6 |
| S8 | 188 | 194 | 1/6 |
| S9 | 180 | 195 | 1/15 |
| TOTAL | 1652 | 1762 | 1/10 |
| Average | 183.56 | 195.78 | 1/12.22 |

The MAPs reading test data (Table 2) shows an increase in test scores for all students. The total score and average in each column shows that the average score for spring 2011 was 189.44 and for winter 2012 was 203.45 and an increase of 14.01 points. An increase of 8 points shows one year of test growth. The average student at $6^{\text {th }}$ grade with the average growth of 14.01 indicated that the student's improved nearly 2 years of improvement during this time period.

Table 2

MAPs Test Reading

| Students | Spring 2011 | Winter 2012 | Increase/Decrease |
| :---: | :---: | :---: | :---: |
| S1 | 189 | 214 | 1/25 |
| S2 | 194 | 210 | 1/16 |
| S3 | 186 | 207 | 1/21 |
| S4 | 191 | 199 | 1/8 |
| S5 | 184 | 199 | 1/15 |
| S6 | 199 | 201 | 1/2 |
| S7 | 189 | 209 | 1/10 |
| S8 | 185 | 189 | 1/4 |
| S9 | 188 | 203 | 1/15 |
| TOTAL | 1705 | 1831 | 1/16 |
| Average | 189.44 | 203.45 | 1/14.01 |

The spring 2011 MSP reading data (Table 3) showed that students averaged a distance of 16.45 from the mean score of 378.50 and in winter 2012 students averaged 13.78 from the mean score of 377.67 . The mean scores show that on the average the students scored higher on the winter 2012 test. Student test scores on the MSP reading test increased for five students' scores but the growth was minimal; from one to

20 points increase. The remaining four students' scores were decreased substantially; from one to 35 points decreased.

Table 3

| Students | Grade 3 08/09 | Grade 4 09/10 | Grade 5 10/11 | Increase/Decrease |
| :---: | :---: | :---: | :---: | :---: |
| S1 | 406 | 400 | 407 | 1/1 |
| S2 | 359 | 385 | 376 | 1/17 |
| S3 | 375 | 387 | 382 | 1/7 |
| S4 | 392 | 375 | 375 | D/17 |
| S5 | 367 | 379 | 366 | D/1 |
| S6 | 378 | 375 | 382 | 1/4 |
| S7 | 359 | 393 | 379 | 1/20 |
| S8 | - | 391 | 356 | D/35 |
| S9 | 392 | 368 | 376 | D/16 |
| Total | 3028 | 3453.03 | 3399.03 | D/20 |
| Average | 378.50 | 383.67 | 377.67 | D/2.22 |

The spring 2011 MSP math data (Table 4) showed that students averaged a distance of 32.00 from the mean score of 371.13 and in winter 2012 students averaged 40.36 from the mean score of 358.11 . The mean scores show that on the average the students scored higher on the winter 2012 test. Student test scores on the MSP math test increased in four students' scores but the growth was minimal; from five to 22
points increase. The remaining five students' scores were decreased substantially; from five to 33 points decreased.

Table 4

MSP Test Scores Math

| Students | Grade 3 08/09 | Grade 4 09/10 | Grade 5 10/11 | Increase/Decrease |
| :---: | :---: | :---: | :---: | :---: |
| S1 | 375 | 376 | 393 | 1/18 |
| S2 | 362 | 323 | 384 | 1/22 |
| S3 | 381 | 323 | 376 | D/5 |
| S4 | 353 | 331 | 358 | 1/5 |
| S5 | 343 | 315 | 348 | 1/5 |
| S6 | 386 | 331 | 353 | D/33 |
| S7 | 407 | 376 | 393 | D/14 |
| S8 | - | 294 | 262 | D/32 |
| S9 | 362 | 358 | 356 | D/20 |
| Total | 2969 | 3027 | 3223 | D/54 |
| Average | 371.13 | 336.33 | 358.11 | D/6 |

Student MAPs scores seemed to be more positive than the MSP test scores. Other things to consider was that the students took the MAPs testing three times per year and the students only took the MSP test one time yearly. These results were viewed to see each student's ability to increase the test score over an average of three
years. After the intervention group was over and the students had taken the MSP for the final year in elementary school the researcher wanted to see if the student's score increased.

The statistical data (Table 5) results show that the MAPS t-values for reading were 5.36 and for math were 5.11 , which shows that these tests did have significance at .01 and were positive test results. However the MSP t-values for reading were .38 and for math were .89 , which shows that these tests did not have significance or positive test results.

Table 5

Statistics Table

| MAPs |  | Pre-Test | Post-Test | Diff/Means | T-Value | Significance |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Reading |  |  |  |  | 5.36 | 0.01 |
|  | Mean | 189.44 | 203.45 | 14.01 |  |  |
|  | St Deviation | 4.72 | 7.52 |  |  |  |
| Math |  |  |  |  | 5.11 | 0.01 |
|  | Mean | 183.56 | 195.78 | 12.22 |  |  |
|  | St Deviation | 4.82 | 8.45 |  |  |  |
| MSP |  |  |  |  | 0.38 | ns |
| Reading |  |  |  |  |  |  |
|  | Mean | 379.89 | 377.67 | -2.22 |  |  |
|  | St Deviation | 16.45 | 13.78 |  | 0.89 | ns |
| Math |  |  |  |  |  |  |
|  | Mean | 336.33 | 358.38 | 22.05 |  |  |
|  | St Deviation | 32.00 | 40.36 |  |  |  |
|  |  |  |  |  |  |  |

## Findings

The findings for the MAPs reading test scores and the MAPs math test scores were positive and showed student score's increased after the intervention group skills and strategies were introduced and taught. The MAPs reading test scores from Spring 2011 and winter 2012 were used as data points on the statistics table (Table 5). On the probability table at 0.01 with 8 degrees of freedom the $t$-value for the MAPs reading test 5.36 is above the value 3.36 , which means that this data does show significant growth on the reading scores. The MAPs math test scores from Spring 2011 and winter 2012 were also used as data points on the statistics table (Table 5). On the probability table at 0.01 with 8 degrees of freedom the $t$-value for the MAPs math test 5.11 is above the value 3.36 , which means that this data does show significant growth on the math scores. Consideration for these test scores could be from the fact that the MAPs test was a shorter test and typically took the majority of all students from 60 to 90 minutes to complete, the student's took the MAPs test three times per year as compared to taking the MSP one time per year.

The findings for the MSP state test were not as positive as the MAPs test results were. The MSP test scores from 2003 and 2005 were used as data points for the MSP statistics table with the exception of student eight who did not have a score for the 2003 MSP test so the 2004 test score was used in place of the 2003 score used for all other students. On the probability table at 0.01 with 8 degrees of freedom, the $t$-value for the MSP reading test .38 is below the value 3.36 , which means that this data does not show significant growth on the reading scores. On the same probability table at 0.01 with 8 degrees of freedom, the t-value for the MSP math test .89 is below the value 3.36 ,
which means that this data does not show significant growth on the math scores. The MSP was a longer test and typically took the majority of all students from 90 to 180 minutes to complete. This suggests that the students could have become tired of taking the test and not taken the time to pay attention to details or the answers they were putting down. The MAPs test was an online test and the MSP was a paper and pencil test. This suggests that the students had better results because the test did not include any writing. Most special education students have some sort of deficit in written language so when they are expected to write things down they will often not take the time to read through their writing which results in less quality work.

## Discussion

As the students tested they seemed more relaxed, they did not need to leave the room as often to take a break, they did not call the teacher to their desk to ask questions about problems that they did not understand as often as they had when they tested before. The students seemed to have more confidence in themselves when faced with the test as a result of the types of problems they had learned to solve and their familiarity with test taking questions. The student intervention group with the added skills and strategies seemed to be more successful with increasing the students' scores on the MAPs reading and math tests than the MSP state test. There can be different reasons for the lower response and success with the MSP test, such as; earlier experiences with the state test may still have a negative effect on the student's attitude, they may not have had enough sleep or food before they take the test. The parent's survey showed that $85 \%$ of the students did have trouble eating and/or sleeping on the nights before they were schedules to take the state test. Some students deliberately
stayed home from school on the day of the test to avoid taking it. Some students may have hurried through test questions because they did not want to write. Some students avoid writing at all cost so they will often skip any questions where there is a written response required to answer the question. Some students admit to only doing true/false questions and multiple-choice questions to avoid writing. Sometimes a student will simply have the wrong attitude for testing that day. Even when students are prepared for testing, their fear of failure or lack of confidence in themselves can often interfere with their test taking, and can sabotage their test score.

## Summary

The data in this study was collected for the nine students who received the intervention, which included skills and strategies that would help increase test taking skills and test score growth. The data came from the MAPs test in spring 2011 and winter 2012. The MAPs test is a test the students take three times per year. The students test scores increase or decrease depending on their performance on the recent test. The data collected was from the MSP test scores over the last three years.

The students did show growth on the MAPs tests. The results did not show the same growth for the MSP test. Teaching the students to answer specific types of test questions did seem to help reduce stress because they were more familiar with the types of questions on the state test. This was shown in their ability to spend more time in their seats during the test, the amount of effort they spent answering test questions and a minor increase in their test score. The increase of the test results on the MAPs test may have been related to the skills and strategies that were taught in the intervention group or it could have also been because it was a computerized test that
they take 3 times per year. The skills and strategies may have addressed some of the skills the students were missing in their learning that would help them be more successful standardized tests.

## Chapter 5

## Summary, Conclusions and Recommendations

## Introduction

The purpose of the project was to increase teacher and administrator understanding that students who are below grade level need to specifically be taught how to answer different types of questions and have frequent practice sessions to have an equal chance as their typical developing peers at being successful on state testing. Study skills and strategies were implemented in an intervention group that was in addition to the students regularly scheduled class time and special education pullout. Student skills and participation was monitored throughout the school and MAPs tests were administered three times per year and the MSP was administer one time per year.

## Summary

The purpose of the project was to specifically teach the students the skills and strategies for the different types of questions and answers they would encounter on the MSP and MAPs tests. With this type of intervention group, intentionally teaching the students what types of questions they will see on the test that they may increase their MSP test scores in reading and math.

The literature review focused on the MSP test or standardized tests in general, the real reasons behind giving these types of tests and whether or not the test gives a clear representation of what it is designed to show. The students chosen for these
interventions were students who were below grade level and who qualified for special education services.

The data collected and analyzed has shown positive findings for the MAPs test results but not for the MSP test results. The students seemed to understand the skills and strategies after they were introduced, taught and practiced in the classroom. The stress the students displayed when new strategies and skills were introduced seemed to decrease as the students became more familiar with the types of questions they answered. The students were able to transfer the skills and strategies to the MAPs test and all students showed an increase in their test results on both the reading and the math test results but the majority of students did not show an increase of test score on the MSP test.

## Conclusions

When the students were specifically taught and given the opportunity to practice the skills and strategies they need to know to answer test-taking questions the students were more successful on the MAPs test than they were on the MSP state test. There could be many reasons for the difference between the ways the students scored on the MAPs test verses the MSP state test. The students may have a negative attitude of the MSP state test because they have heard parents or teachers talk about the test in a negative way. The student may do better on the MAPs test because it is a 60 minute test verses the MSP state test which is a 90 to 120 minute test that takes place over a three week time period. Student performance can have a lot to do with peer pressure. When some students see their classmates begin to finish assignments or tests they feel
they are behind in some way and rush, putting any answer down without any real effort to do well on the test. The student could be tired of three weeks of testing and unable to concentrate. There are so many issues that can be determining factors for why a student does not do well on one test but performs well on another test.

States that state standardized tests are not the only way that students should be tested to show ability level. When collecting data from tests there should be a plan such as; showing individual growth in a subject area but not to compare students, classrooms, schools, districts or states to each other. Even though students are the same age and in the same grade, their life experiences and the learning experiences up to the point of testing can affect the way the student performs.

## Recommendations

As students reach state test taking age they should be given every opportunity to learn and practice test-taking skills to give them the best chance of performing as well as can be expected based on their circumstance. These types of learning opportunities help build self-esteem and take the stress out of test format and leave only the stress of the test itself. Some teachers focus so much time and individualized attention on the students that are close to passing the test while other students are given work to keep them busy. State standardized testing should not be the whole picture used to determine a student's ability level. Teachers should use a comprehensive set of data to create a baseline for the students that spans over time. The teachers should add new scores to that baseline and build up from there.

A test with a negative outcome that should be considered a snapshot for one time period and not the whole picture of a student's skill and ability level in academics. If the student frequently fails the same test each year or each quarter then teachers need to be assessing why that student is not showing progress especially if they have had all the same learning opportunities as their peers. With special education students the teachers already know there is a learning disability and the students need to have the same instructions in order to understand and master the skill. Accommodations and intervention groups like the test taking strategies investigated here should be provided to help those students perform at their best ability. No Child Left Behind is groundwork for teachers and administrators to use as part of a plan that can benefit all the students in the school.

This study shows that not one intervention is enough to help students reach a goal of success on state testing. There needs to be yearlong training for many students including special education students to show success. These students need to know that the test is not a result of their failure but a picture that shows what needs to be done to help them reach grade level success. It is a picture of a number of different things, the curriculum, and the student's ability to learn the information, the teacher's ability to teach the information, the school providing the time to teach what the students need to learn to be successful. The MAPs test and MSP test along with curriculum based assessments and other assessments along the way should be used together to determine student skills and ability level.

As teachers, administrators, parents and students begin to view state tests with a different perspective in mind educators could see a change in the ways our lower
performing student's score on the state tests. Educators should view the test data and results differently. The test may not actually show positive results for all groups of students which is after all what No Child Left Behind is all about; equal opportunities for all students, all students can and will learn when given the right situation.

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## Appendix A

Dear Parents,

Over the next 3 weeks your child will spend 2-5 days taking the Washington State MSP assessment.

The MSP is a required assessment that all students' grades 3 thru 12 take to show academic progress at their grade level.

During this time it is important for your student to get plenty of rest and good nutrition before the exam. Nutritional snacks that will be provided may be one or more of the following: pretzels, graham crackers, gold fish crackers, apple slices or orange slices. If you would like to send an individual snack that you feel is more appropriate for your student please feel free to send snacks on your child's scheduled testing day.

If during this time you feel like your student is becoming stressed or upset by the test please contact the special education team by phone, email or come by our classrooms so we can help your student feel more comfortable about taking this test.

Thank you,

LRC teaching team

Appendix B

MSP Survey
(Given to parents at their child's IEP meeting)

## 1. Has your child taken the MSP before?

Yes
No
Other (please specify)
2. Has your child taken the MSP this year?
$\ulcorner$ Yes
$\ulcorner$ No
$\square$ Other (please specify)
3. Did your child have a good experience when taking the MSP?Yes
■
No
$\ulcorner$ Other (please specify)
4. Did you or your child feel stressed at any time as a result of the MSP test or test preparation?

「
Yes
No
Other (please specify)
5. Was or will your child prepared with proper sleep for the MSP?

## Yes

$\ulcorner$ No
$\square$ Other (please specify)
6. Was or will your child have proper nutrition during the MSP test?

Yes
$\ulcorner$ No
$\square$ Other (please specify)
7. Was your child properly prepared for the MSP academically?
Yes

No
Other (please specify)
8. Did your child bring home practice worksheets or homework to practice for the types of questions on the MSP?
$\ulcorner$ Yes $\Gamma$

No
$\square$ Other (please specify)
9. Did your child express any anger, frustration, cry or lose sleep because of MSP testing?

「
Yes
$\ulcorner$ No
$\square$ Other (please specify)
10. Do you feel educated about the MSP test?
$\ulcorner$ Yes
Г
No
$\square$ Other (please specify)

