The Effects of Teacher Proximity on Student Academic Performance During Testing

A Thesis Presented to the Faculty of California State University, San Marcos in Partial Fulfillment of the Requirements for the Degree Masters of Arts in Education Option in Educational Administration

by

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I want to thank the special people in my life that have loved, supported, and helped me in completing my thesis. To my wonderful parents who instilled in me at an early age the importance of education. To my loving and supportive wife who has made me feel like I can do anything. To my children who have made me want to be the best individual I can. Completing this thesis was not only a personal goal, but also a family goal. I want my children and grandchildren to know how important education is, to always strive to do your best, and always finish what you begin.
The primary focus of this study was to determine the effectiveness of teacher proximity to second grade students in testing situations. Seventy-eight students and three educators agreed to participate in this study. The children were taught material that was age appropriate and assessed weekly. After the assessments were completed, data was collected and results were analyzed. Students’ performance was examined both as individuals and pooled as groups to come up with a set of findings. The findings indicated students’ overall perform was better when given an assessment while in close proximity to an adult. Findings also indicated that children with attention problems have more success when in close proximity to an adult than when placed in a large whole group setting.
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Chapter 1
Introduction

"We have to get our SAT9 scores up. We have to get to 800 on the API." These are thoughts going through administrators' heads throughout California. With the increased emphasis on student scores, educators are looking for effective ways to improve student performance using the resources they already have in place. Many teachers lament that the results of standardized testing do not reflect what they know their students are able to do. It is important to help teachers find ways to control the testing situation to obtain the optimum performance to reflect student knowledge.

After reflecting on various teaching practices when giving students' tests, the effects of the proximity of the teacher became an apparent factor. When a specific child is going through a tough time and really needs to do well on a test, or the test seems too advanced for him/her, there is always a tendency for the teacher to stand in close proximity to the student. This seems to be an instinctual behavior that many teachers have. What effect does it have on student performance?
Upon reflection, the notion of proximity became more important in the case of an ADHD, Attention Deficit Hyperactivity Disorder, child whose parent requested that an extra close eye be kept on their child during the spelling test. The parent had become puzzled and frustrated by the failing grades of his son. He would give his child a pretest on the way to school and the child could always spell the words without any help. But when it came to taking the test in class, the child consistently failed. It was discovered that when the teacher stood next to the child during spelling test, the child scored one hundred percent.

The same procedure, standing close by, was repeated the following week, this time the student only misspelled one word. The teacher decided to take a closer look and see what would happen if he tried this with other children in the classroom. The purpose of taking a closer look was to see if teacher proximity to a particular child or small group of children would increase their performance on tests. The question arose that if improved scores occurred, did it only benefit children with attention problems, or will teacher proximity help all children?
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Statement of the Problem

Because teachers want their students to be able to fairly demonstrate their knowledge in testing situations, the effects of the testing situation should be examined. In particular, the problem that the effect of having an adult close at hand during testing situations is not known. Further, if all tests were given in small groups allowing for close proximity of an adult, rather than in large, whole class settings, would the results be different?

Importance of the Study

The research being done will allow educators and administrators to see if there is a correlation between teacher proximity and student performance in a testing situation. If students’ scores improve, then training can be implemented to instruct educators on the best ways to administer tests to maximize achievement. The study will also attempt to show how students who may have difficulty focusing will increase their scores due to the close teacher proximity.

Limitations of the Study

The study is limited to second grade students enrolled in southern California suburban school. All of
the children were between the ages of seven to nine years old.

Definition of Terms
For the purposes of this study, the following definitions are used:

Proximity - Closeness to an adult.
Small group - Four to seven students sitting in close proximity to the adult.
Whole group - The entire enrollment in a class.
Chapter 2
Review of the Literature

This section discusses the variety of literature relevant to the research of this thesis. It is organized into four sections: class size and student success, proximity and student success, proximity in classroom management and on-task behavior, and teacher proximity to children with special needs.

Class Size and Student Success

Today many schools in the state of California are educating children in kindergarten through third grade in classrooms with a twenty to one student/teacher ratio. What prompted the state to begin a program that costs millions of dollars a year?

Research was done to find out if smaller class sizes helped children perform better academically. According to Joseph Haenn (Haenn, 2002), who studied small class size and academic improvement, small class sizes significantly increase test scores for students in all groups and in all grades. He also pointed out that smaller class sizes produce the largest and most
consistent test gains among disadvantaged children in earlier grades, kindergarten through third grade (Haenn 2002).

In the 2000 California Progress report, there was a research summary on the effects of class size reduction in California, smaller classes promote significantly increased learning in grades kindergarten through third. It was also noted that the longer students are in small classes, the more they benefit. Small classes help minority and low-income students most. Teachers in small classes give students more individual attention and have fewer discipline problems (Cunningham, Thompson, 2001).

This research found that all children benefit from class size reduction, and children who are from low-income families, or are from a minority group, benefit the most.

Proximity, Small Groups, and Student Success

When students are in close proximity to teachers, either in a one-on-one setting, or in a small group setting, academic performance increases. At Goshen Middle School, a predominately Latino school in Indiana, a study was completed on achievement of Latino children
between the ages of thirteen and fourteen. The researchers found "teacher proximity resulted in grades improving 10 percent for some students and more for others. When the teacher was within an arm's length, Hispanic students stayed on task more, seemed more focused, attempted assignments more readily, completed work more accurately, and submitted more completed assignments" (Bartley, Sutton, 1999). Improving on a test by ten percent or more may mean the difference between a passing grade and a failing one. When teachers are continually monitoring the room, not only will they be able to assist their students in a more timely manner, they will be able to manage the classroom for appropriate behavior.

When small group instruction takes place, academic performance and retention of information increases. This is extremely important because sixty-five percent of communication is nonverbal in elementary and secondary classrooms (Hensley 1987). Therefore, when students are in close proximity to an instructor, they have an improved chance to perform. This is evident in the following statement: "lower achieving students made the most academic gains from small group instruction and made more gains when there was more small group
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instruction” (Fenton 1988). Not only does academic performance increase, but so does retention of material. It was noted in an article by David Urion and Neil Davidson that students had better long-term retention in math when instructed in a small group setting. This is very useful research because not only do educators want children to perform up to their capabilities in a testing situation, but they also want them to retain the information being taught so it can help the students in the future.

Although the research noted above focuses on the instructional setting, it is evident that these findings support the hypothesis that teacher proximity increases academic performance and, as a result, will help students perform better in a testing situation.

Proximity in Classroom Management and On Task Behavior

When designing a classroom to best benefit the children; the most important factor in furniture arrangement is teacher proximity to all students. Unfortunately, this is often not the case in classrooms today. High achieving students tend to be seated in the front row or in the first three seats from the front to back down the center aisle. “Those students receive as
much as 63% of teacher interaction. Low achievers are frequently isolated at the back of classrooms where teachers are less likely to travel." (Marable S. & Raimondi L. 1995). The classroom should be arranged so that there is a central open space where a teacher can move quickly from student to student to reinforce and assist those in need of help.

The Oakland Unified School District has a web site designed to assist teachers on various topics. One web page is titled "Arranging the Classroom for Core Values Equipment." This site states that when the teacher is physically close to the students, their on-task behavior increases because he/she is able to reinforce and assist the students frequently. When on-task behavior increases, it is likely that the opportunity for children to learn will also increase. As children are working, they will inevitably come to questions that need answering. When a teacher is in close proximity to his/her children, it is more likely he/she will be able to answer a question in a more timely manner. Therefore, helps a child maintain focus, which will in turn, leads to increased academic performance.

"In the average classroom, teachers and students are separated by an average of twelve feet...the
distance between teacher and students is a critical factor in the communication process." (Sills-Briegel 1996) With such a large distance between teacher and student, the potential for misbehavior increases, because the students may feel invisible and detached from the teacher. When the proximity gap is closed, children will be visible and behavior will improve.

“Close teacher proximity (with three feet) resulted in fewer disruptive responses in a fifth grade classroom” (Etscheidt 1984). When children are continually within arm’s reach, children know that they will be caught more frequently if they misbehave, thus resulting in fewer disruptions. Another benefit of close teacher proximity is that if a disruption occurs, the teacher is able to quickly intervene.

Teacher Proximity to Children with Special Needs
It has been shown that teacher proximity can effect behavior and academic performance in a regular classroom setting. What type of effect does teacher proximity have on students with special needs?

At Mercer University in Atlanta, Georgia, the Services of Students with Disabilities guidelines provide tips for successful classroom performance. The number one tip for successful learning is to sit
students with disabilities in front of the class in close proximity to the teacher. This teaching practice is mandated by the university because they know it gives these students the best opportunity to do well in their coursework.

Children with attention deficit disorder and attention deficit hyperactive disorder can also significantly benefit from close teacher proximity in the whole class or small group setting. "When a child with these special needs was given feedback and acknowledged frequently for proper behavior, it resulted in a dramatic decrease in the school's discipline referrals, allowing students to spend more time in an academic setting" (Ostoits, 1999). This is important information for all teachers to have. Because not all children who have attention deficit disorder or attention deficit hyperactive disorder are diagnosed, it is important to have all classroom environments suitable for these types of children.
Chapter 3
Methodology

Pilot Study

The subjects for the study were second grade students all between the ages of seven and nine. The class used for this study was made up of twenty students, thirteen boys and seven girls, who were all from a middle class neighborhood. All of the children came from a two-parent home, and all but one spoke English as their primary language. The class had two children who saw the resource specialist three times a week and two who went to speech twice a week.

Additionally, two children qualified for Title I assistance and three attended a reading mastery program. Title I and reading mastery are two programs for children who are struggling in reading. Title I is a federally funded program for children who score at least one grade level below their current grade level on state or district reading assessments. Reading Mastery is for those students who do not qualify for Title I, but are still reading below grade level. All of the children in
the class were used as subjects to ensure a range of academic levels was present for the study.

The research began by teaching second grade students lessons about famous people in American History. This area of study is part of the second grade social studies curriculum. Knowledge of famous people in American history is a standard all second grade teachers must teach their students. Standard 2.5, taken from the California second grade social studies curriculum guide, states that students should understand the importance of individual action and character and explain how heroes from long ago and the recent past have made a difference in others' lives (e.g. biographies of Abraham Lincoln, Louis Pasteur, etc.).

The program used for this research project is a district-adopted series called Animated Hero Classic Series by Living History Productions, Inc. This program is organized into individual teacher guides, each focusing on a different famous American with an animated thirty-minute video to accompany each guide. Each teacher's guide contains a twelve-question true/false test that relates directly with the animated video.

The children completed one lesson a week for a total of six weeks. Each lesson began with an animated
video. The children participated in lessons on the following videos: George Washington, Abraham Lincoln, Helen Keller, Alexander Graham Bell, the Wright Brothers, and Louie Pasteur. The theme of the video series, which is woven into each biography, is on tenacity and not giving up. Each video presentation was followed by a discussion about what the participants learned about the famous individual.

After discussing each video and its content, four to six children left the classroom while the other thirteen to fifteen children took the true/false test that is found in the teacher’s guide. The teacher stood in the front of the room in the traditional test administering position and did not move around the classroom while the test was being administered. The children who normally sat in the front row were moved to insure that all children were an equal distance from the teacher.

Each test consisted of ten true/false questions. The researcher is aware that the true/false question test shows low level understanding at the knowledge level of Bloom’s taxonomy. The reason true/false question tests were used was based on the fact that this is what the students were accustomed to and would
adequately represent the kinds of questions often found in standardized testing situations. The questions were read to the students to eliminate the various reading levels as a variable.

After the children had completed the test, the four children, who were taken to another class while the first test was being administered, returned. Then the students who already took the test silent read while the four children who were out of the classroom sat at a round table in the corner of the room with their teacher and took the same true/false test the other children received. The test instructions, noise level, classroom setting, and teacher's tone of voice were all consistent with what the other students experienced. Both groups of children were able to have questions repeated. The only variable manipulated was teacher proximity to test taking students. The purpose of looking at teacher proximity was to see if academic performance increases based solely on how close a teacher is to his/her students when they are taking tests.

Research Study

After running a pilot study on a class of twenty students, the researcher widened the subject areas to include spelling, math, and reading comprehension tests.
The number of students also increased. The test subjects increased from twenty students to fifty-seven students, thirty-two boys and twenty-five girls. The students were all second graders between the ages of seven to nine. The children were in three separate rooms, each being instructed by a different teacher. Out of the fifty-seven children, twelve qualified for Title I and ten qualified for free or reduced lunch. Five children had a primary language other than English. Only one child was pulled out for resource help because of an auditory processing problem. All of the children, with the exception of two, attended their neighborhood school and came from middle-class families where at least one of the parents had a full-time occupation. The two children who did not attend their neighborhood school had parents teaching at the site and had an inter-district transfer.

To account for the natural differences in personality and teaching styles of the three teachers, who were administering the tests for this research project, the researcher sat down with the other two teachers and discussed what the procedures would be when administering the tests. The educators collectively discussed the variables that might already be present in
the classes. The goal was to make each classroom as similar to one another to minimize variability. After the three educators met, a consensus was reached on how the room would be arranged and the manner in which the tests would be administered (see appendix a).

All of the teachers agreed to a furniture arrangement they thought was most conducive to the experiment. The children's desks were arranged in rows with all of the desks facing the front of the room. On the side of each room was a table that seated five to seven children and one adult. This location is where the teacher would administer the tests to the children who were in the small group setting. Because of the close proximity of the children to one another at the table, each child was required to use a privacy board to reduce the chance of cheating, which would produce inaccurate results. The privacy boards were made of cardboard and measured seven inches high and 14 inches wide with a crease in the middle so the boards could be propped up to hide the paper.

All of the children took the test at the same time. The teacher sat at the table seated on the side of the room while giving the tests. The only variable during the test taking time was the proximity of the students
seated at the small table with the teacher, compared to the rest of the students who were seated at their regular classroom desks. This method of test taking was performed the same in all three classrooms participating in the study.

During the tests no children were allowed to ask questions, and the children sitting with the instructor at the table were not given any extra help or time. The teacher's tone and body language was also consistent for all children in the room.

Educator A was responsible for administering six weekly spelling tests. The spelling words came from the second grade Harcourt Brace language arts program that the district has adopted for its language arts curriculum. There were twenty words on the list that each child was supposed to study and learn. Out of the twenty words the children were responsible to study, twelve words were randomly selected for the test. There were also two dictation sentences that the children needed to know for the test. The students were always tested on both of the dictation sentences. Each child was given a list of words and dictation sentences every Monday. The children were required to study three
times a week at home for the test, which was administered every Friday.

Additionally, each child was also required to complete three in-class-spelling lessons each week. The first lesson focused on placing the words in alphabetical order. To provide practice in spelling the spelling words correctly, the second lesson asked children to pick eight words that were written on the white board at the front of the class and write eight sentences using each word once. The third lesson in the district adopted spelling book was to complete the four pages that went with each spelling unit. These pages were designed to help the children learn how to spell the words and learn the definition of each word. If a child was absent for two or more of the assignments or absent on the day of the test, then his/her data was not used.

Educator B was responsible for administering six weekly math tests. Every Friday for six weeks a math test was given. The math test was taken from the second grade district adopted curriculum. The district adopted math program is Saxon.

Each week the children were taught four different math lessons and then were given an assessment on what
they learned that week. Each math lesson during the week consisted of a manipulative based group lesson and a two-sided worksheet. One side of the worksheet was completed in class with the teacher in a whole group setting, and the other side of the sheet was completed at home and returned the next day. If a child did not bring the homework back completed; he/she completed it during the recess break. This insured that all children had the same exposure to the material that they needed to know for the test.

Each math test was very similar to the in-class/homework sheet. Each time the test was administered, the teacher sat at the table at the side of the room with five to seven students. As with the spelling tests, a privacy board was used by the children in the small group setting to insure that the children didn't have an opportunity to cheat. The children in the whole group setting had each of their desks spread apart from one another and were required to use a privacy board.

Educator C was responsible for administering the reading comprehension tests each week. For six weeks Educator C gave a reading comprehension test on the weekly story that was assigned out of the district
adopted literature book. The reading comprehension tests and stories were both published by Harcourt Brace.

The children were introduced to the story and had it read to them in a whole group setting on Monday. After the story was read to the children, they completed a story organizer with the teacher in a whole group setting. On Tuesday, they were responsible for completing five to seven practice book pages relating to the story. The practice book pages covered vocabulary words, spelling words, grammar, and comprehension pages relating to the story. On Wednesday, the children read the story silently to themselves, and on Thursday they were paired according to their reading levels and required to partner read the story. On Friday the test was given.

Each reading comprehension test consisted of seven multiple choice and three fill-in the blank questions. All of the questions related only to the story read that week. The children had the test questions read to them to insure all children would have an equal opportunity to know what each question was asking of them.

The group testing arrangement was consistent with the other groups. Five to seven children came to the table on the side of the room, while the other children
remained at their desks and took the tests. A privacy board was also used for the reading comprehension tests.

Because continuity is so important during testing administration, all of the children rotated classes to take each exam. Educator A, B, and C gave the same test three different times each Friday. This insured that the tone, classroom setting, and any other small variables that the educators might have overlooked would not skew the findings.

Data Collection Procedures

Pilot Study

In order to examine the viability of the study, a pilot was conducted in a single second grade classroom in the social studies curriculum. The testing procedures used for the pilot study provided valuable information in creating the protocols for the research study.

On the day of each lesson, a ten-question true/false test was administered to the whole class with the exception of four to six students. The four to six students who were not taking the test worked in a reading group with a student teacher in another classroom, or were listening to a story at a listening
center in the classroom. The children at the listening center wore headphones, which prevented them from hearing the test that was given. After the four to six children were out of the room or at the listening center, the desks were spread apart to prevent children from cheating. The teacher stayed at the front of the room during the whole test and did not move around the room at any time. The test was read to the students to eliminate reading level as one of the variables. After the children completed the test, the other children were allowed to come back into the classroom or take off their headphones.

The same test was given to the group of four to six students, while the other students who had just taken the test began silent reading at their desks. The children at their desks were instructed not leave their seats while the group of four students were taking the test. They were also not allowed to talk until the students taking the test were finished.

The test was administered at a small round table in the corner of the class. All children were within arms reach. The instructions, the day in which the test was administered, and the teacher's tone were consistent for both groups.
Research Study

The research study differs in some ways with the pilot study to correct some flaws that were identified during the data collection. Even though the researcher obtained some useful and very interesting data during the pilot study, there were two areas that needed to be modified: (1) the movement of children; and, (2) the two separate testing times for the small and large groups of students.

During the pilot study the test was given at two different times; one time for the whole group, and the other time for the small group with the teacher in close proximity. As a result, there was always a group of children who were not taking a test. A few of the students always felt compelled to get out of their seats for whatever reason, even though they were told that they needed to stay in their seat.

The second problem was finding time on a Friday to give the same test twice. The Social Studies tests that were given during the pilot study only took between five to eight minutes to complete, but the tests during the research study sometimes took between twelve to twenty minutes to complete. As a result of the pilot study,
all of the children were given the test at the same time. This reduced the amount of movement in the classroom and time required to perform the experiment.

All of the educators administered and collected the tests in the same format. Each test was read to the children in the same manner, and each child was given enough time to complete the test to the best of their ability. No child was given extra help in either setting. If a child was absent and missed any important material that could seriously affect the child’s success on a test, the child was given the test on a later date and his/her score was not used for the research.

Data Analysis Procedures

Pilot Study

The pilot study results were charted and then a series of mean scores were generated. The researcher calculated a mean score for all of the student’s scores who took the test in the small group setting. The researcher then calculated a mean score for all of the student’s scores who took the test in the large group setting. The means were then compared to see how significantly the scores differed between the two groups.
After calculating two mean scores for the two groups based on the group setting, more averages were generated based on individual student scores. Individual student scores, both in the whole group setting and the small group setting, were recorded in percentage of items correct, averaged and then compared. After this was completed, each student had two scores, one for the large group setting, and one for the small group setting.

Research Study

The findings in the research study were analyzed similarly to the findings in the pilot study. After all of the tests were recorded as percentages, a series of averages were generated to analyze how the children performed in the small group setting compared to the whole group setting. After individual students were compared to themselves and how they performed in the different group setting, class averages were generated to examine the differences between the overall class performance in a small group setting compared to the large group setting. After those averages were generated, results were compared between classes to look
at how small group test taking compares to whole class test taking in different curriculum areas.
Chapter 4

Results

Pilot Study

After giving a series of tests spanning two months, the small group had a higher average score on each assessment, compared to the whole group.

Figure 1. Small group/large group test averages

As noted in Figure 1 the small group testing situation resulted in the group performing well above the whole group on certain assessments (see Tests 2 &
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4), while on others (see Tests 1, 3, 5, & 6), the difference was less.

After analyzing and comparing the scores of the large and small groups, the individual scores were examined to see if there were any children who might have altered the scoring average by being either too high or too low. It was discovered that many of the children had scores that were significantly affected by taking tests in a small group setting.

To examine the effects on students, who were considered at grade level, the scores of students who received a rating of two (at grade level) on their first trimester report card in all academic areas were analyzed. Five students were chosen who showed considerable difference between their small group and large group scores. Not only were these five children at grade level in all academic areas, but they were also not receiving any extra assistance outside the regular classroom, nor did they have a pending Student Study Team conference to work on special academic issues, or Individualized Educational Program as part of the inclusion model of the Special Education program.
Figure 2. Students who improved one or more grade levels

As Figure 2 shows, all five students improved one or two letter grades on each test given. All of the children improved two full letter grade, except for Student 5 who improved one one grade.

After analyzing the results of the different test groupings with the five students above, the researcher looked at the two children who are in a Special Education Resource program because of their inability to attend to task and focus on assignments. These children receive resource assistance three days a week for approximately one hour. In each case, their Individual
Education Plans state that they can function near grade level in all academic areas, but have extreme difficulty focusing on tasks; as a result, the students do not complete most assignments causing their grades to suffer.

Figure 3. Resource children

As noted in Figure 3, Student 1 scored 75.52% in the small group setting, and his average score in the whole group setting was 56.18%. This is an improvement from a grade of F, to a solid C grade on the traditional
grading scale. Student 2 scored 83.00% on the small group tests and his average score on the tests given in the whole group setting was 61.75%. Like Students 1, Student 2 also improved two grade levels when given the tests in the small group setting.

After all of the testing was completed, the researcher looked deeper into why children were performing better in the small group setting compared to the large group setting. The researcher reviewed the observation notes and came to the conclusion that many students, especially the children who were receiving resource assistance, had desires to frequently look around the room and lose focus. When children were given tests in the small group setting, the pacing of the test could be customized to the small group, and was typically faster than when the test was given in the whole group setting. The children had to look to the next question sooner than in the whole group setting. This helped them stay on task and didn’t allow them as many opportunities to get off task.

Overall, the class’ average score in the small group setting was 84.25% and 76.13% in the whole group setting.
Research Study

The researcher first looked at the Educator A's results in spelling. After recording student scores as percentages, the researcher analyzed the results to find out which group performed better, the small group or the large group, and how individual students performed in both group settings. The data derived from the first analysis shows that children who took the spelling assessments in the small group setting scored 90.61%, and the children in the whole group setting scored 87.36%.

Figure 4. Children who significantly improved in small group setting
After analyzing the data for the group averages, the researcher analyzed how specific children did in the small group setting compared to the large group setting. When looking at the results, three children stood out as having significant higher grades in the small group setting compared to the large group setting. The students will be referred to as Student A1, Student A2, and Student A3. It was noted that Students A1, A2, and A3 had an average score in the small group setting of 84.37%, 80.21%, and 92.69% respectively. In the large group setting Students A1, A2, and A3 scores were 73.61%, 70.83%, and 82.29% respectively.

Additionally, it was noted both on prior years report cards and by their current teacher that all three of these students had some sort of attention difficulty when they were in the whole group setting. These three children, two boys and one girl, were not receiving any special help or taking medication.

After Educator B had completed all of the math assessments, and the tests were graded on a percentage scale, the results were analyzed based on the class average in the small group setting compared to the whole group setting.
The results did not show a large discrepancy between the small group and large group setting; the small group class average was 90.04%, and the whole group class average was 86.88%. Because the class averages were so close, the researcher again looked at individual students to see if there were any significant score differences between the small group testing situation and the large group-testing situation. The researcher found two students whose scores were significantly better in the small group setting. Student 1B and Student 2B had average small group scores of 73.50% and 93.50% respectively. Student 1B and 2B’s large group scores were 63.25% and 85.00% respectively.

It was noted that both of these children were very well behaved students and appear to pay attention during instruction time. Student 1B received Title I assistance three times a week for fifty minutes to help with phonics skills and reading fluency. It was noted that this child is very needy and enjoys always being near the teacher. This child also attends before-school and after-school day care and comes from a one-parent home.

Student 2B is an excellent student. He is hard working and completes most assignments at or above grade
level expectations. Student 2B does display a lack of focus at times. He sometimes appears that he is daydreaming or thinking of something else. Student 2B is a student that can be overlooked because the work production and behavior are at or above grade-level. This child demonstrates that he is smart enough to compensate for the lack of focus that is displayed at times.

Educator B shared that because of the close proximity to the students testing during the small group testing, it was easy to see the mistakes students were making. It was noted that many of the problems the children were missing were because they were recording the problem out incorrectly to solve it, thus coming up with an incorrect answer.

After Educator C had given the reading comprehension assessments, the researcher corrected the tests and recorded the scores as percentage of total correct. Mean scores were calculated on the whole class and small group test administration, as well as individual mean scores on the total performance of each child.

Educator C observed that the children that took the tests in the small group setting were better behaved.
Educator C also stated that the students were more eager to ask questions if they were unclear about a word or meaning. Even though the teacher did not answer any questions due to the constraints of the protocol of the study, Educator C could see how it could have improved the small group scores if some of the children had clarification.

After calculating all of the data, the large group mean score was 82.96%, and the mean score of the small group was 86.56%.

After generating the whole group and small group mean scores, the scores were examined to find students who had achieved at least a ten-percentage point difference between their average performance in small group setting and their performance in the whole group setting. It was discovered that four students performed better in the small group setting, and one student performed better in the large group setting. Out of all of the students researched, this student was the only student who scored at least ten-percentage points better in the large group setting. All of the other students either showed little or no difference between the two different group settings.
After analyzing the student's scores in Figure 5, it was found that one of the students who performed better in the small group setting was on medication for ADHD. Two of the students were enrolled in a Title I program for to improve reading fluency, and the other student performed at grade level having no significant behavioral issues. Student 1C with ADHD scored 77.50% in the large group setting and 87.50% in the small group setting. The two students enrolled in Title I, Student 2C and Student 3C, averaged 66.25% and 63.75% respectively in the large group setting, and they both
averaged 80.00% in the small group setting. Student 4C scored 81.25% in the large group setting and 92.50% in the small group setting. The child, Student 5C, who scored better in the large group setting, scored 90.00% in the large group setting and 75.00% in the small group setting. This validates prior studies in proximity and testing that focused on special needs students.

The four students who scored better in a small group setting were all well behaved and focused on the assessment. Educator C noted that Student 5C, who performed better in the large group setting, was a child who liked to be by himself, both in the classroom and out at recess. Educator C questioned Student 5C after all of the testing had taken place about his feelings on being in a small group setting as opposed to the large group setting. Student 5C explained that it was hard for him to concentrate with the other students so close, and that he felt rushed when some of the other children were finishing before him. Student 5C also explained that when he was in the large group setting, he didn’t feel like other children would look at him funny if he completed the test slower than they did.
Discussion

Analysis of the date yielded some very useful information on how children succeed in testing situations. Having the children located near the educator proved beneficial for most children when they were taking an assessment. Because the students who were sitting in a small group setting near the teacher generally did not have as many opportunities to look around in-between questions, the children did not need to be refocused as often for each question. By limiting the time it takes to refocus, children appear to be more likely to stay on task, thus improving the likelihood of best test performance.

The speed at which the test was given was also affected by having children sit in small groups when given an assessment. Each educator noted that when the test was given to the children in the small group setting, the pace at which the assessments were completed was substantially quicker. The increased speed was attributed to not having to wait for other children in the class to complete a given question.

This is important for all children, especially children that have a short attention span. The more time children have to wait for something, the greater
chance of their mind wandering. Also, by completing an assessment quicker, it has the potential of providing the educator with more instructional time to work with students.

All of the educators reported that the children felt special when they could come over to the table and sit with the teacher. When a child feels good about him or herself or is happy, the chances of them performing at a higher level are greater.

Another observation made was how many teachable moments an educator could have if they were in close proximity to a student during a testing situation. Many times a child did not quite grasp the concept being assessed, but with a little re-teaching at a particular moment, the child could attain the concept and knowledge necessary to perform well on a given assessment. This was noted frequently by Educator B when giving the math tests. Educator B noted that there were some situations where the score on an assessment did not accurately reflect what was observed about the child’s knowledge during instruction. Educator B stated that had there been the opportunity to point out where a child had copied down something incorrectly, that the scores in the small group setting would have been greater.
It was also noted that many children like to rush when taking a test. When children are in close proximity to an educator, the educator can address this by physically seeing the students check their work. The researcher does not intend on prompting the child until the student eventually figures out the correct answer. The researcher noticed that if the educator just reminds the students to go over all of the problems on their own, then the success rate might have increased.

Implications for Administrators

What these findings show is that administrators should begin examining how they can incorporate more adults in the classroom setting during assessment times. When an adult is present and in close proximity to a student while he/she is taking a test, scores tend to increase. If an adult is near students to remind them to slow down and check their work during testing situations, then students can better demonstrate their knowledge.
Chapter 5
Summary and Conclusions

Summary

The primary focus of this study was to determine the effectiveness of teacher proximity to second grade students in testing situations. Seventy-eight students and three educators agreed to participate in this study. The children were taught material that was age appropriate and assessed weekly. After the assessments were completed, data was collected and results were analyzed. Students' performance was examined both as individuals and pooled as groups to come up with a set of findings. The findings indicated students' overall performance was better when given an assessment while in close proximity to an adult. Findings also indicated that children with attention problems have more success when in close proximity to an adult than when placed in a large whole group setting.

Conclusions

In conclusion, when children took tests in a small group setting, they generally scored higher. The results
of this experiment are not only important in a testing situation, but it can also benefit students in an instructional setting. It was shown that children paid better attention and could have received more immediate feedback from the educator when sitting in a small group. Children of all ages, who are not learning as fast as their peers, should have as much teacher interaction as possible. If teacher proximity makes such a substantial difference with children who have special needs, then why shouldn’t all children who are struggling be able to benefit from this teaching strategy?

Recommendations

Based on the results of the research, it is recommended that all educators look closely at how they administer tests to their students. It is recommended to all administrators that they find ways of incorporating more adults in the classroom setting during testing and instruction time. It was noted by the three educators that students who participated in the small group setting were more focused. It was also noted that the pace at which the exams were given and completed also increased. As a result of these findings, it would be advantageous for educators to give
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exams in a small group setting. Another recommendation is to make it a priority to administer all exams in a small group setting to any child who appears to have an attention problem.

Implications for Further Research

As the results of the research was examined, many additional research questions arose that warrant further examination:

* Would scores improve more, the same, or less in standardized testing situations when more adults were placed in the classroom?
* At what point would having too many adults affect scores negatively? What would be the best ratio of students to adult when administering exams?
* Would having adults present throughout the year during testing situations, constantly reminding students to slow down and check their work, affect the students when an adult is in close proximity, but unable to say anything, as is the case in the standardized testing format?
* How significantly is learning affected by having children in close proximity to the educator during instruction time?
References


Wongbundhit, Yuwadee (1996). Administration of standardized competency tests: Does the testing environment make a difference? ERS Spectrum, Volume 14, pp.3-8
APPENDIX A: Testing Protocol

The following protocol was used by all educators involved in the research study:

- Each educator will only read the questions directly from the sheet.
- No additional help will be given in either the small group or the large group setting.
- The classes will rotate through each room to take the given assessments (math, spelling, reading comprehension).
- Each educator will give the same test to three different classes.
- No prompting will be given to look over their work or to slow the pace at which they answer the questions.
- The tone and directions would be consistent for all three classes taking the exams.
- All three exams will be given on the same day.
- The educators will not begin to collect tests until all of the students have completed the exam.