

**ASSESSMENT OF ACCELERATED READER PROGRAM
AT LAS BRISAS ELEMENTARY SCHOOL**

by

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**A Master's Research Project submitted in partial fulfillment
of the requirement for the degree
Master of Arts**

OTTAWA UNIVERSITY

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has been approved

August 2000

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ABSTRACT

The purpose of this study was to assess and evaluate the effects the Accelerated Reader had on the students' reading performance grades 3-5 at Las Brisas Elementary School by comparing SAT 9 scores from the 1997-1998 school year to the 1998-1999 SAT 9 scores.

The review of literature points out that in addition to having a variety of reading strategies for continued meaning, comprehension and understanding, the student must also be exposed to a variety of reading genre. Along with the introduction to quality literature, teaching the elements of literature and literary devices will enable students to have a frame of reference for discussing literature, comparing and giving critical judgements, which will promote appreciation and pleasure in reading.

The amount of time a student spends practicing reading is crucial. Studies show that students should be reading sixty minutes a day to become accomplished readers. Students who consistently read are improving their test scores across the curriculum.

SAT 9 scores were gathered from the 1997-1998 school year and were compared to reading scores with the 1998-1999 scores. The school did not use the Accelerated Reader Program during the 1997-1998 school year. Accelerated Reader was implemented and used four months prior to testing in the 1999 school year. The test result comparisons were done between 97-98 grade 3 to 98-99 grade 4, 97-98 grade 4 to 98-99 grade 5, and 97-98 grade 5 to 98-99 grade 6. The grade score comparison is comparing

the scores of the same general student population as they advance from one grade into the next.

The comparison shows those students in third, and fourth grade scored better during the 1998-1999 school year after implementing and using the Accelerated Reader Program. However, fifth grade reading scores dropped four percentage points. The improvement in third, and fourth grade scores may be related to the Accelerated Reader Program. The third, and fourth grade teachers embraced the newly introduced reading program and supported it by regularly visiting the media center and having their students reading AR books and taking the AR quizzes on those completed books. It is not known why fifth grade did not show improvement.

After reviewing test results the consensus was that the implementation of the Accelerated Reader Program was a worthy investment. The positive influence it has had on student performance was remarkable. The increase in reading comprehension and the improved test scores indicates that the amount of time spent on practicing reading has been beneficial to the students, teachers, schools, districts, and states.

The current test results showed growth in student achievement for third, and fourth grades. The apparent increase in scores was primarily attributed to the Accelerated Reading Program, which resulted in a plan to build the library collection and add additional quizzes to the database with titles that are currently in the collection.

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CHAPTER 1

THE PROBLEM

Introduction

Reading practices are being closely scrutinized due to the vast numbers of students who are advancing grades and are still unable to read at grade level. Many schools, districts, and state curriculum development departments are adopting a variety of reading programs, using various reading strategies, and altering teaching methods to develop students into proficient readers. President Clinton's State of the Union Address in 1997 included a mandate that "all fourth graders will be reading at grade level and will be required to pass a standardized test before being allowed to progress to the next grade level" (Gov.Doc.1997 p.3).

This project was designed to evaluate whether the third through sixth grade students at Las Brisas Elementary School have improved their reading skills and grown in their reading ability with the aid and the implementation of a reading management program purchased from Advantage Learning Systems, Inc. called Accelerated Reader (AR) in order to approach and reach the mandate issued by the president.

Currently the state of Arizona is using the Stanford 9 Standardized Achievement Test (SAT 9). It is one of the measurements the state uses to determine student achievement. The SAT test was used in this project to determine the reading level students tested at on the 1997-1998 SAT 9 test and will compare and evaluate student

achievement based on the tests administered in 1999. The students at Las Brisas Elementary School have been using the AR management program for four months. This project is to determine if the AR program helped to improve SAT 9 scores. Paul, (1996) indicates that increasing independent reading time at the students reading level will show improvement in test scores which is the main focus of the Accelerated Reader program.

With the implementation of the Accelerated Reader Program and increasing the students independent reading time, the researcher is expecting to find improved reading comprehension and increased scores on SAT 9 tests. The Accelerated Reader Program includes a computerized reading test (STAR) that assesses the students' reading level and provides a list of skills already acquired by the student, and it assists the instructor in determining what skills need to be taught next. In addition, assessing SAT 9 will assist in evaluating student academic growth in reading comprehension, math, and language.

Development of the Problem

President Clinton declared in his 1997 State of the Union Address, "...all fourth graders will be reading at grade level and will be required to pass a standardized test before being allowed to progress to the next grade level" (Gov. Doc. 1997 p.3). This mandate has challenged educators to evaluate teaching practices and has some educators in a frenzy; they are trying new methods or techniques, or are reverting to old tried and true methods of teaching. It has administrators questioning issues such as the following:

A. What are teachers doing in the classroom: Which theories, teaching methods, and styles are being used? Which teaching style or method is most effective: Harcourt/Brace

Literature, the Learning Literacy Model, by Richard C. Owens, Spaldings' Writing Road to Reading, or Thematic Units?

B. How much time is spent on independent reading practice (Paul, 1996.)?

C. What reading strategies are being used? Is the teacher using Guided Reading, Independent Reading, Reading aloud to model reading, does the text look right, sound right, and make sense? Is the student reading for meaning, re-reading when meaning breaks down, using phonics, beginning sounds, ending sounds, root words, prefixes, and suffixes (Morrison, 1994)?

D. Is the fluent reader then introduced to a variety of genres, taught the elements of literature, and allowed explore the use of literary devices (Hall, 1990)?

E. What reading assessments are being used: Running Records (Goodman, 1973), Stanford 9 scores, STAR reports provided by the AR program?

F. What are our reading statistics showing (www.edweek.org)?

These questions, when answered, can determine if fourth grade students will in fact be prepared to pass a standardized test, and be allowed to advance to the next grade level.

Las Brisas Elementary School had a team of teachers who strongly believed in Richard C. Owens' Learning Literacy Model (1992). The Learning Literacy Model is a reading model that is most effective when the teacher knows the learner. The teacher must know each learner individually, assess what they know, instruct the learner, evaluate the student, then repeat the process. This team of teachers were mentors who taught and implemented the Learning Literacy Model, summer institutes, guided and coached teachers for two years, and had weekly dialogues. Two of the top teacher mentors left the school and went to work for Richard C. Owens. The remaining team of

teachers tried to keep the learning literacy model in practice, however due to the change in leadership other teachers explored a variety of ways to teach reading and writing. Some teachers continued to use R. C. Owens, while others used Harcourt/Brace, which is the district-adopted curriculum, a few implemented Spaldings' (1990) Writing Road to Reading, and some used other various approaches. The staff was no longer united in the vision of what teaching reading should look like.

Need for Study

In an effort to re-unite the staff, in January 1999, the school implemented Advantage Learning Inc.'s. Reading software program, Accelerated Reader. The assistant principal and the library media specialist went to a conference to learn about the program. They returned and introduced the teachers to the program. An afternoon was spent in staff development. At the inception of Accelerated Reader implementation, the teachers were asked to experiment with it during spring semester. It was the expectation that all teachers would participate in this program beginning the 1999-2000 school year.

Purpose of the Study

The purpose of this project is to assess and evaluate the effects the Accelerated Reader Program has had on the students' reading performance grades 3-5 at Las Brisas Elementary School by comparing SAT 9 scores from the 1997-1998 school year to the 1998-1999 SAT 9 scores.

Research Question

What effect has the Accelerated Reader Program had on student achievement based on the results of the 1999 SAT 9 scores?

Definition of Terms

Accelerated Reader Management Program: A reading program that offers comprehension quizzes on a variety of books. Includes STAR reading ability test, instant evaluation of students' reading ability, assess what strategies students know, what still needs to be taught.

Stanford 9 - Standardized Achievement used Nationwide to assess Reading Comprehension, Language Arts, and Math Skills.

Zone of Proximal Development (ZPD) - The level at which a student is being challenged by exposure to new vocabulary and concepts without becoming frustrated. The student can practice reading independently.

Independent Reading - Reading at an individual reading level.

Running Records - An assessment tool used to assess reading strategies when a student reads aloud.

To, With, Independent (TWI) Reading opportunities: Read To, Read With, and Read Independently.

CHAPTER 2

LITERATURE REVIEW

Introduction

Teachers, administrators, districts, and states are being held accountable for student achievement. Core curriculum areas are being studied thoroughly. Reading practices are being particularly scrutinized due to President Clinton's mandate that all fourth graders will be reading at grade level and pass a standardized test before being allowed to advance to the next grade level. The review of literature will include what teachers are doing at Las Brisas Elementary School in regards to teaching reading; 1) reading strategies that are being taught, for emergent and fluent readers, developing life-long readers; 2) amount of time spent on reading; 3) reading assessments; 4) reading statistics showing growth due to the implementation of Accelerated Reader; and 5) the variety of resources being used.

Reading Strategies

Effective teachers need to teach their students reading strategies. Reading strategies are skills used to help a reader when meaning breaks down. Teaching strategies can be accomplished during a Read To, Shared Reading and Independent Reading. A Read To is when the teacher reads aloud to a group of children. The teacher

can ask for predictions and also allow students to finish repetitive phrases. A Shared Reading is when the teacher reads through a book first and then has the students join in on the second reading. During the second reading the teacher could cover up predictable words and have the class fill in the missing word. This is where the students are thinking what would make sense there. Independent reading is when the student is fluent and practices reading at their independent reading level (Morrison, 1994).

When instructing emergent readers it is important for the teacher to teach them to ask themselves while reading: Did that look right? Did that sound right? Did that make sense? The teacher needs to assess if the students are reading for meaning. Are they using structural clues? Are they using visual clues? Is the child looking at the pictures for clues? Does the child predict? Does the child check on their predictions? The teacher needs to teach the strategy of self-monitoring, re-reading, and to look further when meaning breaks down. In addition to these skills an important strategy that an emergent reader must learn is self-correction. If meaning breaks down the child needs to re-read and make appropriate corrections (Morrison, 1994). As a child learns these skills and strategies and becomes a fluent reader, the teacher will then want to teach the student to read with expression. When students are fluent readers it is then the teacher's job to help them become life-long readers. This can begin to happen when teachers provide them with a variety genre, teach them the literary elements, and literary devices. Having this base knowledge will allow the student to move beyond the literal interpretation to its symbolic meaning.

Providing students with a variety of literatures is valuable to the students' experience. It allows children to explore a variety of writing styles and literary

composition. Teachers, reading specialists, and library media specialists want to develop lifelong readers who travel to imaginative worlds, face and conquer human experiences, discover adventures, expand interests, find meaning in their lives, and know the enchantment of books. Webster's Seventh New Collegiate Dictionary defines genre as "a distinctive type or category of literary composition." Genre denotes the major literary classifications, divisions, category, variety, style, or class of literature. It is a type of literature in which components share common characteristics. The different types of genre include adventure, animal stories, fantasy, historical fiction, humor, mystery, realistic fiction, and science fiction. Realistic fiction includes stories about sports, friendship and romance as subgenres (Van Vliet, 1992). It is important to provide a variety of literatures for students so they can experience mystery, fantasy, adventure, and history through books. It is hoped that children will become avid readers who are dedicated as amateur mystery sleuths, enchanted fantasy believers, courageous adventure seekers, loyal animal friends, historical fiction buffs, staunch sports supporters, science fiction fans or incurable romanticists (Van Vliet, 1992). Hopefully teachers, reading specialists and library media specialists will be committed to providing these types of reading opportunities.

In addition to exploring a variety of genres, it is the teacher's responsibility to introduce students to the literary elements. These elements include plot, characterization, theme, tone, point of view, style, setting, and design (Gunning, 1992).

Plot is the arrangement of the story or the sequence of events. It usually has a rising action, a climax, and a falling action. The protagonist becomes involved in

conflict, struggles against opposing forces, helps make discoveries or find clues, and contributes to the resolution of the conflict (Van Vliet, 1992).

Characterization is an important literary element. Good characterization includes personality, recognizable qualities, and responds to action the way the readers expect them to. They have emotional and social qualities that distinguish them from others. Their thoughts and actions are believable. Their appearance, dress, speech, and mannerisms are realistic (Van Vliet, 1992).

Theme, simplistically put by Malless and McQuain in the Elements of English is “the point of the story” (p. 24). There may be more than one theme in a story. Lukens (1986) states that the theme of literature is “the idea that ties and holds a story together”(p. 111). Barnet (1986) in A Short Guide to Writing about Literature, says that theme is the underlying idea that helps the reader see what the plot is really about.

The author’s tone is another element of literature. Tone is the attitude of the author to a work of literature. It indicates how the author feels toward a subject or character. Tone can be formal or informal, playful or serious, happy or angry, confident or sarcastic, delightful or scornful, accepting or rejecting. Tone is how the author speaks quietly to himself or herself (Van Vliet, 1992).

If tone is how the author speaks to himself or herself, then point of view is how the author presents the actions of the story. Point of view is the vantage point or perspective from which the story is told. Lukens (1986), in A Critical Handbook of Children’s Literature defines point of view as seeing “events through the eyes and mind of one character” (p. 128).

Style is the element of literature that is the personality of the writing piece. It is the way a story is written, in contrast to what the story is about. According to Malless and McQuain (1988) in The Elements of English

Style is the way the author uses language, diction, grammatical patterns, and types and lengths of sentences. It is the sum of the author's talent and skill in using language to convey meaning of the theme, details of the plot, the sense of time and place in the setting, and the personality of the characters. (p. 88)

Style can be defined as the author's arrangement of words to express individuality, idea, and intent. According to Holman and Harman (1986) style is "the adaptation of one's language to one's ideas" (p. 487).

Setting involves time and place. Time can be any time, the present for realistic fiction, the past for historical fiction, or the future for science fiction. Time can be a historical time period such as the Revolutionary War; it can be a specified period of time such as 1838-1842, a specific century, or a specified period of time such as the Stone Age. Time can encompass a lifetime, a few months, or just a few days (Van Vliet, 1992).

Setting is developed in realistic stories, adventure, mystery, sports, humor, and animal stories in familiar or local settings, to faraway lands. The setting in fantasy or science fiction stories, whether real or imaginary is sharpened by detailed description and attention to minute details that heightens real or imaginary. The setting may reveal a magical, fantastic, or technological world that may or may not give an air of reality to the story. The sense of time, period, and place support the action of the story (Van Vliet, 1992).

Design, art, and illustrations play an important role in all children's books.

Students notice illustrations, jacket covers, and overall design. Design compliments the

text with particular attention to all the details. Illustrations provide a visual statement by the artist to add to the writer's text. Illustrations must compliment, enhance, and extend the text (Van Vliet, 1992).

The artist uses a variety of artistic elements when illustrating a book. Elements include line, color, texture, pattern, composition, perspective, shape, and form. Techniques include pen, ink, pastels, charcoal, colored pencil, collage, and wood block. The use of these mediums adds to the visual images that the author creates (Van Vliet, 1992).

Knowing these literary elements will provide students with a frame of reference for discussing literature, comparing styles, giving insights to the author's purpose, instilling perceptions of techniques, evoking critical judgements, and promoting appreciation and pleasure (Van Vliet, 1992).

In addition to learning elements of literature it is the teacher's, reading specialists, and library media specialist's, job to instruct the student in the use of literary devices. What is a literary device and how is it used? This information can be easily demonstrated through the use of picture storybooks. Readers should learn about literary devices so they can move beyond literal interpretation of a story and on to its symbolic level. They can accomplish this by exploring how literary devices function. Educators want students to be able to discriminate and appreciate quality literature by being able to recognize the use of literary devices (Hall, 1990). There are approximately thirty literary devices; the following sample is taken from Hall's (1990) book Using Picture Storybooks to Teach Literary Devices:

Alliteration – repeated consonant sound occurring at the beginning of words and within words as well; used to establish mood (p.31).

Ambiguity—alternative reactions to the same piece of language: same expression that conveys more than one meaning simultaneously (p.38).

Hyperbole—obvious and extravagant exaggeration not meant to be taken literally (p.62).

Imagery—mental pictures summoned up by terms and expression that appeal to the senses so that the audience see, hear, smell, feel, and taste much of what the characters experience; such images can create a writer's tone (p.64).

Metaphor—a suggested comparison between two unlike things for the purpose of pointing out an implied similarity of some sort between them; suggests that one thing is the other thing (p.93).

Personification—a figure of speech that assigns human qualities, actions, characteristics, or personality to an animal, an object, a natural force, or an idea (p.103).

Simile—explicit comparison from one unlike thing to another which shares some common recognizable similarity; uses “like,” “as,” “such as,” and “than” to set them off (p.119).

When students have the knowledge of literary devices they gather information and anticipate story structure. They mature in their ability to decipher meaning and differentiate concepts. They can analyze and discuss literature intelligently. Reading comprehension is improved (Hall, 1990).

Amount of Time Spent on Reading

Terrance Paul (1996) conducted the largest reading study ever in education history. This landmark study collected reading performance data for 659,214 K-12 students during the 1994-95 school year. The findings showed that students practiced reading an average of seven minutes a day. High school seniors read about three minutes a day, which is about the same amount of time a kindergartner practiced.

The old adage, “practice makes perfect” seems to hold true when discussing reading. The more you read, the better you read. To become an accomplished reader it has been recommended that students practice reading at their independent reading level for sixty minutes a day. The level at which a student is being challenged by exposure to new vocabulary and concepts without becoming frustrated is their independent reading level or their zone of proximal development (ZPD). Reading practice at their ZPD will promote maximum development. Students who consistently read at their ZPD improved on standardized test scores as much as 15.3 points over a three-year period during grades 3 to 6. From grades 6 to 8 test scores improved 13.2 points per year (Peak & Dewalt 1994). Improved test scores also carried over to math.

Reading Assessments

Assessing student achievement is an integral part of the educational process. There are several types of assessments being used in the classroom: A) Portfolio; B) personal observation; C) observational survey; D) standardized tests; and E) STAR Reading Test.

Portfolios are developmental pictures of students' progress. Using portfolios as a means of assessment provides a way of evaluating not only the end product but also the process of learning that occurred in the learning environment. According to Clemmons, Laase, Cooper, Areglado, and Dill (1993), a portfolio is a collection of student work over a period of time. Portfolios show student's development in reading and writing. The contents of a portfolio can showcase students' achievement throughout the reading and writing process. It would include pre-writing, mapping, rough draft and the polished product. The contents of the portfolio would contain works selected by the student. Portfolios are often passed along to the students' next teacher to aid that teacher in assessing the students' concepts they are learning, the thinking process, organization of their thoughts, and the problem solving skills they are using (Clemmons et al., 1993).

Personal Observation is another form of assessing a student. Teachers observe students in the learning environment. Teachers watch problem solving skills, student interactions, and behaviors. The teacher records what is observed and can use that information for future reference, next teaching points, and making connections.

The Observational Survey developed by Clay (1985) is an excellent tool for assessing emergent readers' students entering first grade. The observational survey includes: letter identification, concepts of print, sight word test, writing vocabulary, dictation test, and a running record. The results of this survey enable the teacher to determine what the student knows and gives the teacher a clear picture of the students' next learning step. The letter identification is a page of capital and lower case letters; the student identifies all that they know. Concepts of print includes front of the book, first and last, where to start, which way to go, return sweep, line order altered, meaning of a

question mark and period, meaning of quotation mark and comma, one letter, two letters, one word, two words, and capital letters. Sight word test includes three columns of sight words. The teacher scores the student based on the words they can identify and the words they attempt to identify. The writing vocabulary piece is asking the student to write all the words they know starting with their name. Prompts can be given to help them think of words. Dictation test is the teacher dictating a sentence and having the student attempt writing as much as they can. The running record is a complex system of checks and symbols used while the student is reading aloud. It tells the teacher if attempts are being made on unknown words, if meaning breaks down, if the student self corrects, if the student is using visual clues and contextual clues, and the rate of error and accuracy (Clay 1985). This observational survey is an excellent tool for teachers to use when assessing emergent readers.

The Standardized Test used by the State of Arizona is the Stanford Achievement Test, Ninth Edition; it is a norm-referenced test. It compares each student's achievement to the achievement of a representative national sample of public-school students of the same age and grade, called the norming group, at a particular point in time, the norming year. The Stanford 9 test results are reported as percentile ranks and grade equivalency. Percentile rank means that if a student scored in the 58th percentile, it means that 58 percent of the students in the norming group scored at or below that point.

A score near the 50th percentile indicates the child's performance on the test is about average; the 75th percentile or above is considered above-average performance; and the 25th percentile or below is considered below average and perhaps points to a need for more academic support.

The Stanford 9 test results are based on a bell-shaped curve. That means half of the nation's students will do above average and half will do below average or fail. The percentile ranks do not represent actual amounts of ability.

Besides percentile ranks, the Stanford 9 results are reported in grade equivalencies. For example, if a fourth-grader scores 7.5 in reading, that means the fourth-grader did as well as a seventh-grader in the fifth month of the school year would do on that test. Individual student scores also show the actual number of items answered correctly, so parents can get a more detailed look at how their children did (Baker, 1999).

STAR Reading Test is a computer-adaptive reading test, and database is an achievement-level learning information system that provides teachers with accurate reading scores for grades 1-12 in 10 minutes or less. It serves two primary purposes. First, it provides teachers with quick and accurate estimates of students' instructional reading levels. Second, it offers sound estimates of students' reading levels relative to national norms. For teachers, STAR facilitates individualized instruction by identifying children who need remediation or enrichment the most. It also furnishes a wealth of reliable and timely data on reading growth. It provides a valid basis for comparing data across schools, grades, and special student populations (Advantage Learning Systems 1998).

Reading Statistics

Accountability for teaching, performance, and achievement is being scrutinized very closely. Teachers, principals, districts, and states are being held accountable for the scores students are earning on standardized tests across the country. States must

complete a State Report Card. The report card rates all states in five major areas: Student Achievement, Standards, Assessments, and Accountability, Teacher Quality, School Climate, and Resources (Department of Education 1997-1998). This researchers main focus was the reading scores for the state of Arizona because that is the effected area of research.

The standardized test that was administered was the National Assessment Education Plan (NAEP) in 1994. The results showed 24 % of AZ 4th grade students at a “proficient” level on the reading exam. 28 % of AZ 4th grade students scored at a “basic” level. And 48 % of AZ 4th grade students scored “below basic” level. Arizona’s overall grade for math, science, and reading was a “B” (Department of Education 1997-1998).

The following information comes from a paper delivered at the National Reading Research Center Conference in Atlanta, GA. on October 4, 1996. The study showed the impact that Accelerated Reader Technology-Based Literacy Program had on Overall Academic Achievement and School Attendance. The study compared 2,500 Texas schools using Accelerated Reader to 3,500 Texas schools of the same demographic similarities that were not using Accelerated Reader (Paul, 1996).

The results of the comparative study is as follows:

- A. Students scored significantly higher at schools using Accelerated Reader in all subject areas, including math, science, social studies, and reading.
- B. Schools using Accelerated Reader had significantly higher attendance.
- C. Urban schools with low socioeconomic environments benefited more than metropolitan schools.

D. The length of time a school used Accelerated Reader contributed significantly to gains in academic performance.

E. The number of computers in a school, or the technology available in a school did not affect performance results (Paul 1996, p.1).

Based on these results the study concluded that Accelerated Reader had a positive influence on student performance, particularly socioeconomically disadvantaged children in urban areas. There was compelling evidence that Accelerated Reader was an effective tool in stimulating reading and that increased reading lead to higher academic performance (Paul, 1996).

An independent study of a Mississippi Elementary School used the STAR reading test as a tool for pre and post testing. Two hundred and fifty-five students were tested. The number of students reading below grade level at the beginning of the 97-98 year was 172. By the end of the year 85 students remained below grade level. The number of students reading at grade level at the beginning of the year was 59. By the end of the year 101 students were at grade level. The number of students reading above grade level at the beginning of the year was 24. By the end of the year 69 students were above grade level. The pre-test showed 67% of the students reading below grade level. By the end of the school year there were only 33% of the students reading below grade level. This shows a significant increase due to the implementation of the Accelerated Reader Program (Easterling, 1999).

Another independent study at McCamey Primary School in Texas showed that Accelerated Reader had a positive affect on a class of second graders. The teacher utilized the STAR test in August 1997 as a pre-test. Then again in February 1998, as the

post-test. Of the 38 students tested during that six-month period, they all experienced 1.5 years of growth at the instructional reading level. The 16 students who were reading below grade level averaged 1.8 years of growth at the instructional level. The number of students who could read above the second grade level in August 1997 tripled by February 1998. Three of the students were reading at the fifth grade level (Bolen, 1999).

Variety of Reading Resources

Approximately one-third of the teachers at Las Brisas are using the Learning Literacy Model of teaching reading, designed by Richard C. Owens out of New Zealand. The premise of this style of teaching is the teaching/learning cycle. The teacher must know their learner, assess what they know, instruct the learner, evaluate the student, then repeat the process. The teacher must know the next instructional steps, approaches to take, and the resources available (Owens, 1992). Exposing the students to a variety of quality literatures with good concepts is essential. In the primary grades when teachers are working with emergent readers the teacher must tie the child's writing to the reading process. An example is the child dictates an idea or story, then the teacher publishes it for the child. Because the idea was from the child's personal experience, they will read it over and over again, thus the emergent reader (Owens, 1992).

Spalding's phonics program is another approach being used to teach reading. The premise of this philosophy is if you can sound it out you can read it. Spalding's program is a very structured and regimented phonics program. It teaches the seventy-three phonograms and every rule for every letter and its corresponding sound relationship (Spalding, 1990). Spalding also uses a comprehensive word list to teach spelling.

A few teachers utilize the Harcourt/Brace Literature Treasury (Farr & Strickland, 1995) which is the district adopted reading program. It is an integrated reading and language arts program that offers a wealth of literature to touch the hearts and minds of its readers. The authors' philosophy is that reading is an interactive process of constructing meaning, which allows students to learn and practice strategies being taught. Students integrate listening, speaking, reading, writing, spelling, and thinking skills. Farr & Strickland (1995) believe in immersing the student in print rich environments, which allows for natural curiosity about print to develop. The authors believe a classroom should offer a variety of instructional activities that provide for all different learning modalities (vii).

A few teachers also teach reading through a thematic unit approach. They pick a theme appropriate to the grade level and read a variety of literatures matching that theme. An example of a thematic unit could be apples. The teacher could read Johnny Appleseed and tie it to social studies, Ten Apples on Top, as part of the math unit, Rain Makes Applesauce, as part of the literature and art units. Then they would have all the students bring in their favorite kind of apple and make a graph of their favorites. To conclude the unit students would make and eat applesauce (Montgomery, 1992).

Summary

The reading process is a long and complicated one. Emergent readers need to be taught a variety of reading strategies. This can be accomplished during a Read To, Shared Reading, and Independent Reading. It is important that the teacher identifies that the student is reading for meaning and that comprehension does not break down. It is

imperative that the student has a variety of reading strategies to use if the text does not make sense.

Once the teacher has a fluent reader, it is valuable to allow the children to read a variety of genres. Children can explore mystery, fantasy, adventure, historical fiction, sports fiction, science fiction, or romance. They can take countless adventures through books. The teacher is also responsible to teach students that there are elements of literature and literary devices that authors use to create a piece of fiction. When students have an understanding of these elements and devices they will have a frame of reference for discussing literature, comparing and giving critical judgements, which will promote appreciation and pleasure in reading. Students will be allowed to move beyond the literal interpretation of a story and on to its symbolic level.

The amount of time a student spends on practicing reading at his/her identified independent reading level is critical. The statement "practice makes perfect" seems to hold true when discussing time spent on the task of reading. Children should be reading sixty minutes a day to become an accomplished reader. Practicing reading will promote maximum development. Students who consistently read are improving on their test scores across the curriculum.

Diversity in student and teacher population is recognized at Las Brisas. Teachers offer a variety of teaching modalities, styles, and techniques. They also have a plethora of assessment tools for evaluating students. These include, portfolios, observation, Observational Survey, standardized achievements tests, norm-referenced tests, and the STAR reading test produced by Advantage Learning Systems. The use of any one or a

combination of all of these assessments allows the teacher to acquire a clear understanding of their student's strengths and weaknesses.

CHAPTER 3

METHODOLOGY

Purpose

The purpose of this project is to assess and evaluate the effects the Accelerated Reader Program has had on students' reading performance grades 3-5 at Las Brisas Elementary School by comparing SAT 9 scores from the 1997-1998 school year to the 1998-1999 scores.

Research Design

The methodology design used for this research project is of the descriptive design. Merriam and Simpson (1995) point out that this method allows the researcher to "describe facts and characteristics of given phenomena, identify problems, examine current conditions or practices, and evaluate a product" (p. 61). The challenge involved in this project was to try to get every fourth grade child to read at the fourth grade level so they can successfully pass a required standardized reading test before they would be allowed to progress to the next level. This project examined current teaching practices, by finding out what teaching strategies, theories, and styles were being used in the classroom. The researcher evaluated student achievement by comparing Stanford 9 test

scores from one school year to the next. Finally the researcher investigated whether the Accelerated Reader Program has had a positive effect on student achievement.

Implementation Design

First through sixth grades are to be included in this program. A goal has been set that students will spend sixty minutes per day reading independently. Teacher monitoring must occur and students will be held accountable for that reading practice time. Accountability can be verified with the use of a reading log.

With approximately 850 students participating in this program, the Media Center will need to expand the library collection. In addition to adding more books to the library, the program allows custom disks be ordered with AR quizzes that will match books already being housed in the media center. The goal of the media center is to have at least fifty percent of the collection be AR books that students may take quizzes on.

Students reading independently at their identified zone of proximal development (ZPD) for sixty minutes a day with support and instruction from the classroom teacher should show growth in their reading level and ability (Paul, 1996). Comparing 1997-1998 Stanford 9 scores to 1998-1999 scores should show improved scores. When the AR program is in place for a full year and test scores are compared again, significant gains should be evident.

Population and Sample

When evaluating student achievement one must look at and understand location, student demographics, curriculum, and staffing. Las Brisas Elementary School is located

in the Northwest Valley (58th Ave. and Alameda) in Phoenix, Arizona. The school has been open and operating as a K-6 school from 1993-2000. Las Brisas has a student enrollment of 845 students. Three hundred thirty-one students in grades 3-5 were involved in the pre testing and post testing. The school has students with a variety of socioeconomic backgrounds and ethnicity's.

Student achievement can be linked to instructional programs, curriculum, and extra curricular activities. Las Brisas Elementary School offers a kindergarten enrichment program for half-day kindergarten students. It offers a variety of instructional programs including; Gifted classes, Special Ed. pre-school, SLI programs (Speech/Language Impaired) for both primary and intermediate, Multiple handicap class, Computer/Technology class, DARE (Drug, Alcohol, Resistance Education), and Reading and Math resource classes.

The curriculum includes Saxon and Kendall/Hunt for math, Harcourt/Brace and Richard C. Owens Learning Literacy for reading and writing, Addison/ Wesley and BSCS for science. Las Brisas opens its campus for a number of other enriching experiences, too. Faculty and parents teach and coach band, chorus, steel drums, chess, newspaper, student council, gymnastics, and Star Skippers (jumping rope).

The state of Arizona requires district sponsored public schools to hire state certified teachers. All of Las Brisas teaching staff is certified. Table 1 shows degree completion and years of teaching experience of the staff at Las Brisas Elementary School. Approximately fifty percent of the teaching staff has been with the school since it opened in 1993.

Table 1. Las Brisas Staffing Information:

Degrees	Bachelor's	Master's	Doctorate	Endorsements
3 or fewer yrs.	15	2	0	4
4 to 6 yrs.	8	4	0	5
7 to 9 yrs	3	2	0	2
10 or more yrs.	7	2	0	4

Assumptions and Limitations

The source of data collected was limited to SAT 9 standardized test scores from the school year 1997-1998 and SAT 9 scores 1998-1999. There is always the argument that some students do not test well, or a student was having a bad day, or they didn't get enough sleep, or have a nutritious breakfast. The test stands as a valid instrument for measuring student achievement. The test scores are being compared after only four months of implementing the Accelerated Reader Program. It is expected that higher test scores will be even more evident at the end of a full year of using the AR program.

Procedure

The assistant principal and the library media specialist were sent to a one-day seminar to be trained in the use of the Accelerated Reading Program. They returned and spent an afternoon of staff development training the faculty. Teachers were asked to review their students' files and note the students' reading level from last year's SAT 9 scores. The teacher was then asked to determine the student's zone of proximal

development (ZPD). The zone of proximal development is the level of reading at which a student is being challenged by exposure to new vocabulary and concepts without becoming frustrated. The students were then introduced to the AR program and were encouraged to regularly check books out from the library that were within their ZPD. Students read books and then take a quiz to determine reading comprehension. The student's goal was to score in the 92 percentile or above. The school goal was to have students reading independently within their ZPD sixty minutes a day.

Instrumentation

The instrument used to collect the data was from the Stanford 9 Standardized Achievement Test from the 1997-1998 and 1998-1999 school years. The test is a standardized test used nation wide to rank students, schools, districts, and states. Because it is a standardized test and used nationwide as a tool to measure student achievement its reliability and validity is renowned.

For approximately six weeks prior to testing, students were given the opportunity to take a variety of practice tests. Instructions were handed out to students and parents suggesting students eat a healthy breakfast, get a good night sleep, and be well rested. Snacks were provided during the testing time. A quiet environment was provided. Proctors were stationed in the hallways to ensure silence, and to assist teachers if necessary.

Teachers spent a half-day of in-service training on how to administer the Stanford 9 test. With all the guidelines and security in place the second through sixth grade

students were administered the test April 19th, 20th, and 21st 1999. The tests were forwarded to the state-scoring center and the school then awaited the results.

CHAPTER 4

PRESENTATION and ANALYSIS of the DATA

Demographics

When evaluating student achievement one must look at and understand location, student demographics, curriculum, and staffing. Las Brisas Elementary School is an urban school located in the Northwest Valley (58th Ave. and Alameda) in Phoenix, Arizona. The school has been open and operating as a K-6 school for the past six years. Las Brisas has a student enrollment of 845 students. The school has students with a variety of socioeconomic backgrounds and ethnicities. The following Table 2 shows the number of students in third, fourth, and fifth, grade who took the SAT 9 in the 97-98 and 98-99 school years.

Table 2. Number of students taking Stanford 9

1997-1998		1998-1999	
Grade 3	95	Grade 3	95
Grade 4	118	Grade 4	113
Grade 5	84	Grade 5	123
Total	297	Total	331

Table 3 shows the number of male and the number of female students taking the Stanford 9 test 97-98 and 98-99 school years.

Table 3. Number of male and female students taking Stanford 9

1997-1998	Grade 3	Grade 4	Grade 5	Total
Males	46	61	43	150
Females	49	57	41	147
Total	95	118	84	297

1998-1999	Grade 4	Grade 5	Grade 6	Total
Males	53	61	49	163
Females	60	62	62	184
Total	113	123	111	347

Las Brisas school is currently enrolling new students on a weekly basis. New construction and community development has new people moving into the area regularly. Projected school growth over the next two years is 200 students. This growth is reflected by the increase of 50 students taking SAT 9 in 98-99, compared to 97-98. The test results from these students may have some effect on overall test scores. The researcher assumes that academic dispersion within a grade level has remained constant over the course of the study.

SAT 9 scores were gathered from the 1997-1998 school year and will compare reading scores with the 1998-1999 scores. The school did not use the Accelerated Reader Program during the 1997-1998 school. Accelerated Reader was implemented and used

four months prior to testing in the 1999 school year. Table 4 shows the results of the Stanford 9 Standardized Test scores for the school years of 1997-1998 as compared to 1998-1999. The test result comparisons will be done between 97-98 grade 3 to 98-99 grade 4, 97-98 grade 4 to 98-99 grade 5, and 97-98 grade 5 to 98-99 grade 6. The grade score comparison is comparing the scores of the same general student population as they advance from one grade into the next.

Table 4. Stanford 9 Standardized Test Scores

Scores represent percentage point variations

1997-1998	% points	1998-1999	% points
Grade 3 Reading	67	Grade 4 Reading	79
Grade 4 Reading	68	Grade 5 Reading	70
Grade 5 Reading	73	Grade 6 Reading	69

The Comparison shows those students in third, and fourth grade scored better during the 1998-1999 school year after implementing and using the Accelerated Reader Program. However, fifth grade reading scores dropped four percentage points. The improvement in third, and fourth grade scores may be related to the Accelerated Reader Program. The third, and fourth grade teachers embraced the newly introduced reading program and supported it by regularly visiting the media center and having their students reading AR books and taking the AR quizzes on those completed books. It is not known why fifth grade did not show improvement.

When evaluating the test scores it's important to note that any improvement over the national standardized norm of 50 percent is considered a positive gain. The vice principal, Muriel Ornelis of Las Brisas Elementary School in Glendale, Arizona stated in

August 1999 that in a school where there is minimal mobility and the student population is stable, an improvement of even three percent is recognized as a decent gain.

CHAPTER 5

SUMMARY, CONCLUSION, and RECOMMENDATIONS

Summary

The purpose of this project was to assess and evaluate the effects the Accelerated Reader Program has had on the reading performance of students grades 3-5 at Las Brisas Elementary School by comparing SAT 9 scores from the 1997-1998 school year to the 1998-1999 SAT 9 scores.

The literature review indicates that once the teacher has a fluent reader it is valuable to allow the children to read a variety of genres. Children can explore mystery, fantasy, adventure, historical fiction, sports fiction, science fiction, or romance. They can take countless adventures through books. The teacher is also responsible to teach students that the are elements of literature and literary devices that authors use to create a piece of fiction. When students have an understanding of these elements and devices they will have a frame of reference for discussing literature, comparing styles, be able to give critical judgements, and it will promote appreciation and pleasure in reading. Students will be allowed to move beyond the literal interpretation of a story and on to its symbolic level.

The amount of time a student spends on practicing reading at their identified independent reading level is critical. The statement "practice make perfect" seems to hold true when discussing time spent on the task of reading. Children should be reading

sixty minutes a day to become an accomplished reader. Practicing reading should promote maximum development. Students who consistently read are improving on their test scores across the curriculum.

As eclectic as a school is with their student population, they are as diverse in their teacher population. Teachers offer a variety of teaching modalities, styles, and techniques. They also have a plethora of assessment tools for evaluating students. These include, portfolios, observation, Observational Survey, standardized achievements tests, norm-referenced tests, and the STAR reading test produced by Advantage Learning Systems. The use of any one or a combination of all of these assessments allows the teacher to acquire a clear understanding of their student's strengths and weaknesses.

At Las Brisas the researcher compared 1997-1998 Stanford 9 reading test scores of third, fourth, and fifth grade students to the 1998-1999 Stanford 9 reading test scores of fourth, fifth, and sixth grade students. Resulting in improvements in grades 3 to 4 with a 12% growth, and grades 4 to 5 with a 2% growth, but a 4% regression in 5 to 6 grade students.

Conclusion

After reviewing several independent studies in the literature review the consensus was that the implementation of the Accelerated Reader Program was a worthy investment. The positive influence it has had on student performance was remarkable. The increase in reading comprehension and the improved test scores indicates that the amount of time spent on practicing reading has been beneficial to the students, teachers, schools, districts, and states.

This study demonstrated that having implemented the Accelerated reader program prior to administering the SAT 9 this study shows that increased reading practice, the AR program, and other unknown factors had a positive effect on students in third and fourth, grade. Third grade test scores improved 12 percent. Fourth grades test scores improved 2 percent. Fifth grade test scores showed a decline of 4 percent. No connection was found to explain the drop in scores. However, the assessment committee surmised that when implemented correctly the AR program could be an excellent tool for teachers to advance students to the next reading level.

Recommendations

The current test results showed growth in student achievement for third, and fourth grades. The apparent increase in scores was primarily attributed to the Accelerated Reading Program, which resulted in a plan to build the library collection and add additional quizzes to the database with titles that are currently in the collection.

The researcher also presented the results to the staff, and instituted staff development, training them in managing the Accelerated Reader Program. This should be continued as an annual training, especially to determine if the reading improvement and decline develops into a predictable pattern. It is vital that the staff is enthusiastic about the program and utilizes its features to its fullest potential. It will save them time and guesswork in evaluating their students reading level. Information provided by AR informs the teacher reading strategies the student currently possesses, and suggests next teaching points.

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