

DOCUMENT RESUME

ED 453 542

CS 217 552

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TITLE Improving Vocabulary Acquisition through Direct and Indirect Teaching.
PUB DATE 2001-05-00
NOTE 72p.; Master of Arts Action Research Project, Saint Xavier University and SkyLight Professional Development.
PUB TYPE Dissertations/Theses (040) -- Tests/Questionnaires (160)
EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS Action Research; Elementary Education; *Instructional Effectiveness; Reading Aloud to Others; *Reading Comprehension; *Reading Improvement; Sustained Silent Reading; *Vocabulary Development
IDENTIFIERS Direct Instruction; Illinois (Chicago)

ABSTRACT

Students who lag behind in vocabulary commonly experience academic failure. A student's vocabulary knowledge directly impacts reading comprehension. To improve comprehension, students need exposure to a variety of literature and opportunities for meaningful practice of vocabulary they encounter daily. Vocabulary is developed through a variety of experiences including extensive opportunities with reading. Teacher observations, test scores and surveys of the targeted student body (grades two/three Montessori, and grades five and six self-contained classes at three different Chicago, Illinois public schools) will be examined to explore a correlation between vocabulary knowledge and reading comprehension. Analysis of the literature revealed that lack of vocabulary knowledge can be attributed to parental influences and socioeconomic factors, lack of students' prior knowledge and deficiencies in instructional strategies. A review of the solution strategies suggested by the professional literature and an analysis of the problem resulted in a combination of a direct and indirect intervention. The direct methods included providing strategies for learning vocabulary independently. The indirect method included reading aloud to students and monitoring students as they engaged in sustained silent reading. Post intervention data indicated that as a result of direct and indirect vocabulary teaching, students demonstrated an increase in vocabulary growth. Students also demonstrated an increase in their reading comprehension. (Contains 60 references, and a table and 9 figures of data. Appendixes contain the parent survey, reading logs, the student survey instrument, and vocabulary tests.) (Author/RS)

IMPROVING VOCABULARY ACQUISITION THROUGH DIRECT AND INDIRECT TEACHING

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A Research Project Submitted to the Graduate Faculty of the
School of Education in Partial Fulfillment of the
Requirements for the Degree of Master of Arts

Saint Xavier University

Chicago, Illinois

May, 2001

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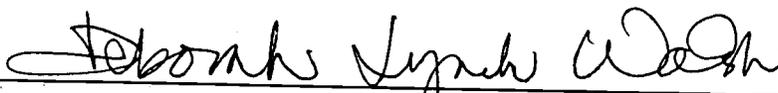
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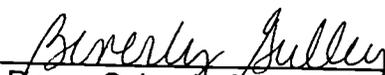
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Abstract

Students who lag behind in vocabulary commonly experience academic failure. A student's vocabulary knowledge directly impacts reading comprehension. To improve comprehension, students need exposure to a variety of literature and opportunities for meaningful practice of vocabulary they encounter daily. Vocabulary is developed through a variety of experiences including extensive opportunities with reading. Teacher observations, test scores and surveys of the targeted student body (grades two/three Montessori, and grades five and six self-contained classes at three different Chicago public schools) will be examined to explore a correlation between vocabulary knowledge and reading comprehension.

Analysis of the literature revealed that lack of vocabulary knowledge can be attributed to parental influences and socioeconomic factors, lack of students' prior knowledge and deficiencies in instructional strategies.

A review of the solution strategies suggested by the professional literature and an analysis of the problem resulted in a combination of a direct and indirect intervention. The direct methods included providing strategies for learning vocabulary independently. The indirect method included reading aloud to students and monitoring students as they engaged in sustained silent reading.

Post intervention data indicated that as a result of direct and indirect vocabulary teaching, students demonstrated an increase in vocabulary growth. Students also demonstrated an increase in their reading comprehension.

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CHAPTER 1

PROBLEM STATEMENT AND CONTEXT

General Statement of the Problem

Students who lag behind in vocabulary commonly experience academic failure. A student's vocabulary knowledge directly impacts reading comprehension. To improve comprehension, students need exposure to a variety of literature and opportunities for meaningful practice of vocabulary they encounter daily. Vocabulary is developed through a variety of experiences including extensive opportunities with reading. Teacher observations, test scores, and surveys of the targeted student body in grades two, five and six at three different urban public schools will be examined to explore the connection between vocabulary knowledge and reading comprehension.

Immediate Problem Context

Local Setting

Sites A, B and C are all elementary schools located in the city of Chicago, School District 299. The racial breakdown of the district was 9.9% Caucasian, 52.3% African-American, 34.4% Hispanic, 3.2% Asian/Pacific Islander, and 0.2% Native American with a total enrollment of 426,814 students. The attendance rate was 91.6% with a 26.6% mobility rate and a 4.3% truancy rate.

Site A was an urban elementary school consisting of 704 students ages 5-13. At the time of the research the population consisted of 46.6% Caucasian, 49.4% African-

American, 3.0% Hispanic, 0.9% Asian/Pacific Islander, and 0.1% Native American students. The average class size was 14.0 children in kindergarten, 27.6 students in grade one, 28.3 students in grade three, 32.0 in grade six and 30.7 students in grade eight with a mobility rate 7.8%. The attendance rate was 95.3% with 0.0% chronic truancy. Nearly fifteen percent of the students (14.8%) were classified low-income and none had limited English proficiency.

The student body of the traditional program was comprised of one half-day kindergarten, one first grade, one first/second grade split, one of each grade level second through fourth, two each of fifth through eighth grades. The student body of the Montessori program consisted of one full-day kindergarten, two first/second splits, one second/third split, one third grade, one fourth grade, and one fifth/sixth split classrooms.

Site B was an urban elementary school housing pre-kindergarten through eighth grade classes with an enrollment of 370 students. At the time of the research the school population was 31.1% Caucasian, 3.5% African-American, 57.6% Hispanic, 6.8% Asian/Pacific Islander, and 1.1% Native American. The school had an attendance rate of 93.9% and a mobility rate of 31.7%. Low-income students comprised 83.8% of the population, with 21.9% classified as limited English Proficient.

Site B classrooms included a Head-Start program, two half-day kindergartens, one bilingual first grade, one first grade, one second grade, one split second/third bilingual class, one third grade, two fourth grade rooms, and one of each room for grades five through eight. The average class size was 22.5 in kindergarten, 20.5 in grade one, 19.0 in grade three, 30.0 in grade six, and 25.0 in grade eight.

Site C was an urban pre-kindergarten through eighth grade elementary school consisting of over 857 students. The students' racial-ethnic background was 50.1% Caucasian, 14.6% African-American, 33.7% Hispanic, 1.5% Asian/Pacific Islander, and 0.1% Native American. The attendance rate was 93.4% with 3.1% chronic truancy and a mobility rate of 15.2%. At the time of the research, 68.4% of the students were classified as low-income, and 16.4% with limited English proficiency.

The student body was comprised of one pre-kindergarten, one full-day kindergarten, two half-day kindergartens, three of each grade level first through sixth, two each of seventh and eighth grades, and one seventh/eighth split. There were also six self-contained learning disabled classrooms. The average class size was 28.7 in kindergarten, 31 in grade one, 33.7 in grade three, 27.7 in grade six, and 30.7 in grade eight.

Staff

Site A staff consisted of a principal, a half-time freed assistant principal, a counselor, a librarian, a Montessori coordinator, a school clerk, a music teacher, an art teacher, a physical education teacher, six special education teachers, 23 classroom teachers (with seven being Montessori teachers), nine teaching assistants and one teachers' aide. The racial balance of the staff consisted of 15 Caucasians, seven African-Americans, one Hispanic, with a combined average of 20 years of teaching experience. Thirteen teachers held Bachelors' degrees, and 10 held Masters' degrees. Ancillary support staff available included a speech pathologist, a nurse, a school psychologist, and a social worker.

Site B staff consisted of a principal, a counselor, a clerk, a bilingual coordinator, a librarian/math tutor, a physical education teacher, a reading/technology coordinator, a half-time music teacher, a half-time art teacher, and 15 full-time classroom teachers which included two special education teachers. Support staff included a part-time psychologist, a social worker, a nurse and a speech pathologist. A number of aides also provided assistance and performed numerous tasks. The racial balance of the teaching staff included eight Caucasians, five African-Americans, and two Hispanics with a combined average of 15 years teaching experience. Five of the teachers held Masters' degrees and 10 held Bachelors' degrees.

Site C staff consisted of a principal, an assistant principal, a counselor, a secretary, a clerk, a librarian, a physical education teacher, a half-time librarian/P.E. teacher, a computer teacher, a music teacher, two reading specialists, two behavior disorder resource teachers, six special education teachers, and 26 regular classroom teachers. The racial makeup of the teaching staff consisted of 20 Caucasians, three African-Americans, and three Hispanics with a combined average of 13 years teaching experience. Twenty of the teachers held Bachelors' degrees and six held Masters' degrees. Ancillary support staff available included two ESL teachers, a school psychologist, a speech pathologist, two speech assistants, two vision-impaired specialists, one part-time occupational therapist, one part-time nurse, one part-time social worker, and numerous aides.

Facility

The construction of Site A, a three-story building, was completed in 1931. It consisted of a school office, an auditorium, a large gymnasium, a library that shares

space with a learning disabilities class, a teacher lunchroom and an auditorium closet converted into a copy/planning room. Although the building was not considered overcrowded by Chicago Board of Education standards, a seventh grade class was being held in a hallway, and all available closets have been converted into offices.

The building was well maintained and not in need of any major repairs. The hallways and classrooms were clean, well organized and inviting. Students' work and achievements were prominently displayed throughout the building.

Site B was undergoing numerous restoration projects, as the building was over 100 years old. New windows and shades were installed and renovation of the exterior of the building had begun. Work yet to be completed included new floors and interior painting. The building had a gym, library, and a computer room (also used for reading tutoring), a video room (also used for math tutoring), and a cafeteria. Class size was large in the upper intermediate and junior high grades, where only one class of each grade was present. The primary grades were smaller, but in general, all classes are on the high end of the accepted limits.

Site C was a two-story building with two modular units. It consisted of a school office, a nurse's/assistant principal's office, a gymnasium, a teacher's lounge, a lunchroom, a copy room, a speech room, a library, a computer lab, an ESL room, an LD resource room, a reading recovery room, a visually-impaired room, four special education rooms, and 26 regular classrooms.

The building was recently renovated. New windows, shades, and air conditioners were installed at the end of the 1998-99 school year. The building was rewired during the summer break of 1999 to accommodate future internet access in all

classrooms. The building was well-maintained. The hallways and classrooms were clean and were recently painted as part of the school renovation project.

Programs

Site A, located on the far southwest side of Chicago, offered a comprehensive program of instruction for children in kindergarten through eighth grade. In addition to the traditional educational program, the Montessori approach was offered to students in kindergarten through grade six. The Montessori approach encourages the child to become an independent learner based on the philosophy of Maria Montessori.

Applications for this Options for Knowledge Program were accepted yearly through a lottery system. Children in grades six, seven and eight participate in the Middle School Program. This program offered a transition from the lower grades to high school. It introduced the student to the departmental structure of the high school, while using integrated learning with a strong emphasis on the core subjects.

In keeping with Site A's philosophy of educating the whole child, Site A offered many additional programs and activities. Some of these included Proposed Pre International Baccalaureate Program with the local high school, a Great Books Program, Builders Club, Environmental Club, Yearbook, Newspaper, Math Team, Young Authors, Science Fair, Band, Strings, Chorus, Cheerleading, Volleyball, Soccer, Basketball and a strong cultural arts program. Students provided community service through tutoring, community beautification programs, volunteer hours at neighborhood senior citizen centers, food drives, and community outreach programs, such as The Big Help. An active PTA provided a broad range of activities and support for the school. Parent involvement was a vital part of Site A. At Site A, 100% of students'

parents/guardians had personal contact with the school staff during the school year, which included parent-teacher conferences, parental visits to school, school visits to home, telephone conversations, and written correspondence.

Site B's mission was to develop students who meet and exceed standards as measured by test and alternate assessments. Developing students who would be lifetime learners and employable was also part of this mission. The principal, teachers and staff along with the parents and community considered themselves partners in this mission. Site B offered tutoring classes twice each week in both Math and Reading to those students who received low scores on the previous year's Iowa Test of Basic Skills, or those who were struggling with the level of instruction. In the Spring, enrichment classes were held after school, also on a twice-weekly basis. A computer class was also offered after school. An after-school gym program which tied into the basketball team was held on Mondays and Fridays. Drama and occasional dance classes met after school. The upper-grade students participated in the regional Science Fair and Junior Great Books. Some classes also received Spanish language instruction. Teachers entered their students in appropriate grade level contests and programs such as Book-It and 600 Minutes reading program.

Site C was dedicated to become a school where all students achieve at a level commensurate with their maximum academic potential. The school offered various programs and activities to help the students reach these goals. Some of these included Honors Club, Basketball, Volleyball, Cheerleading, Pom Poms, after-school reading and math programs for at-risk students, and DARE for fifth graders. Throughout the year students were also encouraged to participate in Young Authors, Science Fair,

Accelerated Reader, Book-It, and 600 Minutes programs. At Site C, 100% of students' parents/guardians had personal contact with the school staff during the school year.

Community Context

Site A was located on the far south side of Chicago with a population of approximately 25,000 people. The community, once home to mostly Irish immigrants, was now ethnically diverse. The median income of residents was \$64,000 and the median home value, \$115,000. The community was home to the Beverly Arts Center, "a multidisciplinary, multiple-arts organization." A local public library was within walking distance of the school.

Site B was located in a small neighborhood of about 30,000 people. The public school was located on the south side of the city. The neighborhood, once home to mostly Irish immigrants was ethnically diverse. A recent boom in townhomes was occurring. The median income of residents was \$31,225 and the median home value, \$87,248. A Boys and Girls Club was within walking distance of the school and offered activities, including tutoring for the students. A local public library was within blocks of the school and some classes visited there early in the school year. Businesses were small and the once thriving main street for shopping was in flux, with dilapidated and vacant shops apparent. Police and fire stations were only blocks away from the school. Personal contact between parents/guardians and the school staff during the school year was 100%.

Site C was one of four schools servicing this community with a 1998 population of 30,899. The surrounding neighborhood of Site C consisted of mostly single-family ranch and Cape-Cod style homes, the majority built between 1940 and 1970, and

having a median value of \$110,000. The median age of residents was 38.9 years with an average of 12.7 years of school completed. The community was home to a major shopping complex and industrial park. A local public library was located within easy access to the school. The racial distribution of the community was 82.9% Caucasian, 10.2% African-American, 6% Hispanic, and 0.9% other. The percentage of employment was 58.8%. There were 15,324 crimes reported in the area in 1998, the majority nonviolent. A growing gang element was prevalent in the community.

Regional and National Context of the Problem

Teachers continually struggle with how to make learning relevant and to increase transfer of what they teach into other areas. This is true in the area of vocabulary instruction and reading comprehension. What is the best way to teach children how to attack new words they meet within their reading? How can children's vocabulary increase so that they may comfortably attack words which they do not know? Vocabulary instruction is vitally important. Professionals widely agree that "... a student's knowledge of word meanings is a significant factor in comprehension" (Beck et al., 1982; Graves, 1986).

While using a dictionary and finding definitions is the most traditional method of vocabulary instruction, recent light has been shed on using the context to teach new words. "Children appear to learn words at a rapid rate; they may add as many as 3,000 words annually to their reading vocabularies between third and twelfth grades" (Nagy & Herman, 1984). A small percentage of this growth can be attributed to direct vocabulary instruction (Jenkins & Dixon, 1983). If this is true, then it must be hypothesized that children learn most new words incidentally from context while reading and from listening

(Jenkins & Dixon, 1983; Jenkins, Stein & Wysocki, 1984; Nagy & Anderson, 1984; Nagy, Herman & Anderson, 1985).

The professional literature suggests that in order to increase a child's vocabulary, repeated exposure to good literature and the ability to form concepts, and attach prior knowledge, seem to be important considerations (Nagy, Anderson & Herman, 1987).

Teachers suffer an impossible task if they attempt to teach children all the new words they encounter in their reading. If teachers can foster a desire to read and expose their students to a variety of texts, they will be successful in helping them to increase their vocabulary. Even small incremental learning of new words can be significant if students are exposed to enough reading to increase their word knowledge. A student who reads at the 90th percentile has 200 times the exposure to written language as the student at the 10th percentile (Nagy, Anderson & Herman, 1987). Statistics show that incremental learning of vocabulary, from context, accounts for about one-third of a child's annual vocabulary growth, a number not approached by any other method of instruction (Nagy, Anderson & Herman, 1987).

With the hope of increasing students' vocabulary knowledge and reading comprehension by teaching them how to recognize context clues and exposing them to a wide range of quality literature, this project developed.

CHAPTER 2

PROBLEM DOCUMENTATION

Problem Evidence

In order to document and assess the vocabulary knowledge of the targeted third, fifth and sixth grade students, several data collection methods were used. The data collection methods included: a survey of parents' reading habits and family recreational habits, as well as an informal survey of family demographics; a survey of students' reading habits; a norm-referenced vocabulary and comprehension test, the Gates-MacGinitie Reading Test; and a teacher created pre and post vocabulary test. A survey of parents' reading habits and recreational interests was given to parents of students in grades three (Site A), five (Site B), and six (Site C) of the targeted classes. The survey was developed by the teacher/researchers (Appendix A).

In the written survey, parents were asked to indicate the number of hours they spent reading, the time spent reading to their children, as well as the time spent engaging in various recreational activities. In the informal survey, parents were asked if their child attended some sort of preschool program, the age their child started reading, and the primary language spoken in the home. An economic profile was also compiled based on the information obtained from the Chapter One Free or Reduced Lunch Program.

Of the 77 surveys distributed, 72 were returned and used. A summary of the parents' survey responses from each site follows. Based on the formal/written Parent Survey, parents of students in grade three (Site A) reported that all personally read at least one hour per day, and more than three-fourths subscribed to some sort of current reading materials (e.g., newspaper or monthly magazine). Parents also reported that more than half spent at least one hour per night reading aloud to their child, and spent an average of only one to two hours watching television daily. They reported that their children spent one to two hours watching television daily, visited the library at least once a week, and participated in family-related activities monthly.

Based on the information gathered from the informal parent survey for the targeted third grade students (Site A), parents reported that all children attended some sort of preschool program. More than three-fourths began reading before first grade, half of them reading before kindergarten. Parents also reported that English was the predominate language spoken in the home. None of the children in the targeted third grade class would be considered "Low-Income," based on Chicago Board of Education classification.

Based on the formal/written Parent Survey, parents of students in grade five (Site B) reported that more than three-fourths personally read at least one hour per day and also subscribed to some sort of current reading materials. More than half of the parents also reported that they spent at least one hour per night reading aloud to their child and spent an average of one to two hours watching television daily. They also reported that their children spent one to two hours watching television daily, that they visited the library at least once a week, and they participated in family-related activities monthly.

Based on the information gathered from the informal parent survey for the targeted fifth grade students (Site B), parents reported that more than half the children attended some sort of preschool program, and more than half began reading in first grade. Also, more than half reported a language other than English was predominately spoken in the home. All but two of the children in the targeted fifth grade class would be considered "Low-Income" based on Chicago Board of Education classification.

Based on the formal/written Parent Survey, parents of students in grade six (Site C) reported that all personally read at least one hour per day, and almost half read a daily newspaper. Parents also reported that more than half spent at least one hour per night reading aloud to their child. They spent an average of only one to two hours watching television daily. Their children spent one to two hours watching television daily. They reported visiting the library at least once a week, and participating in family-related activities monthly.

Based on the information gathered from the informal parent survey for the targeted sixth grade students (Site C), parents reported that more than half the children attended some sort of preschool program. Approximately half began reading in or before kindergarten. Also, more than half reported a language other than English was predominately spoken in the home. More than half of the children in the targeted sixth grade class would be considered "Low-Income" based on Chicago Board of Education classification.

The parents' written and informal surveys were given at the beginning of the school year. On the question regarding parents' personal daily reading time, at Sites A, B, and C, a majority of parents spent a minimum of one hour reading daily for personal

interest. At Sites B and C, nearly 20% of the parents did not spend any time engaged in personal reading. The data are illustrated in Figure 1.

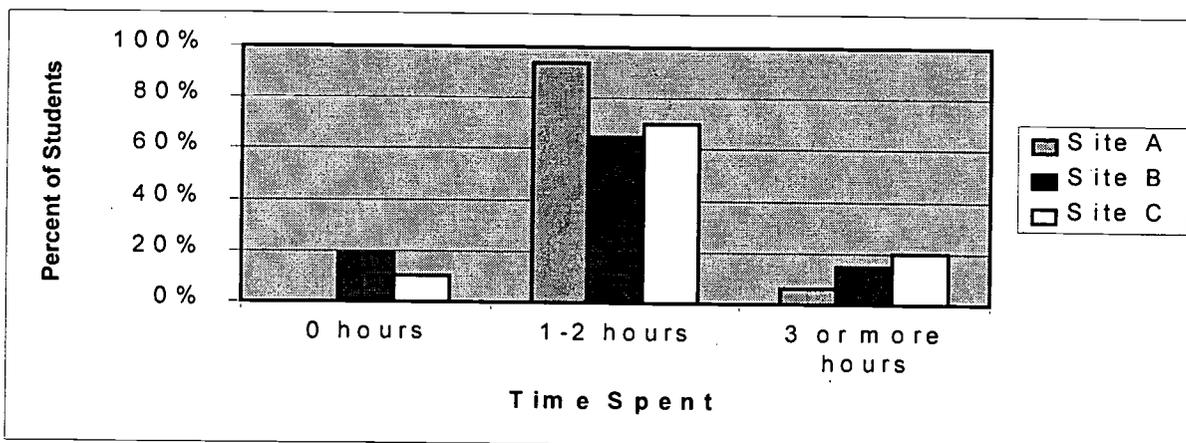


Figure 1. Parents' personal daily reading time

At Sites A, B, and C, a majority of parents spent a minimum of one or more hours reading aloud to their child daily. However, nearly one-third of the parents at the three sites reported spending no time reading aloud to their child. The data are illustrated in Figure 2.

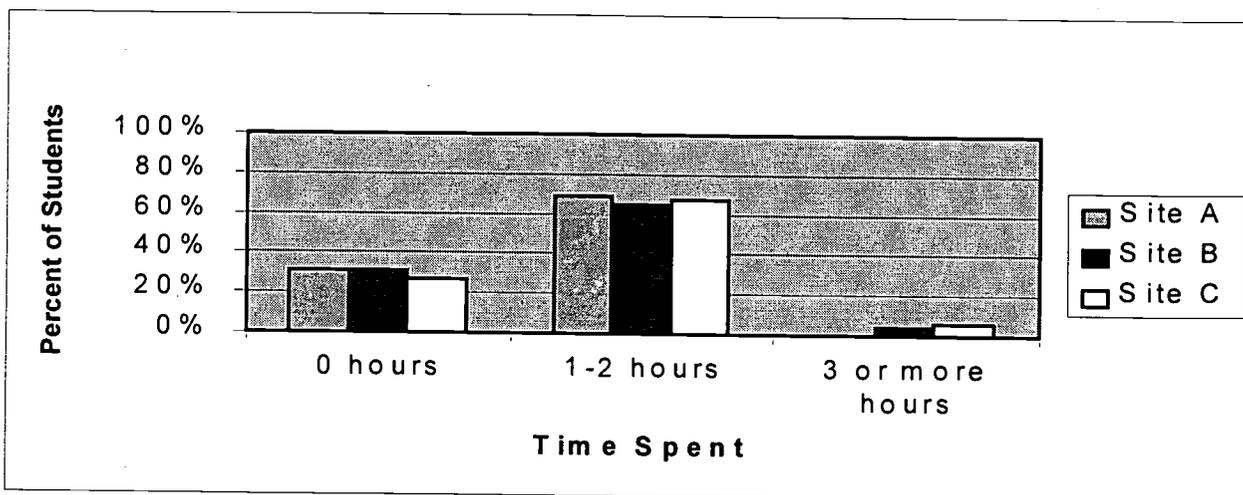


Figure 2. Hours parents read to child daily

Regarding daily television viewing by adults, over 90% of the adult population surveyed from the targeted classrooms at Sites A, B, and C spent a minimum of one or more hours viewing television daily. One to two hours were reported to be the most significant block of viewing time. The data are illustrated in Figure 3.

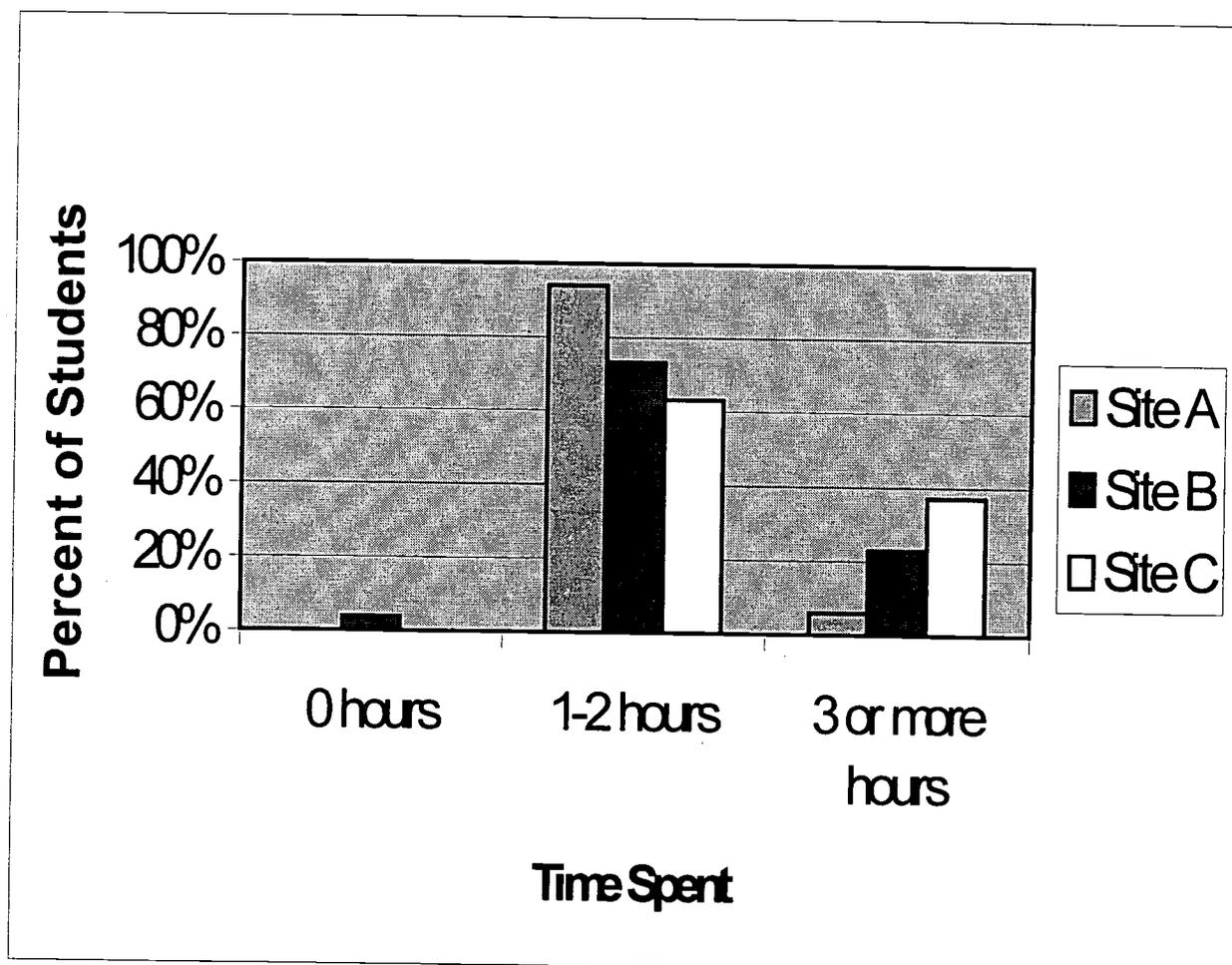


Figure 3. Daily television viewing by adults

Regarding daily television viewing by children in the targeted classrooms, similar results to the parents' television viewing habits were reported. The majority of the children surveyed spent approximately one to two hours viewing television daily. However, over 15% of the children at Site A, over 25% at Site B, and over 35% at Site C, spent three or more hours viewing television daily, as reported by parents. The data are illustrated in Figure 4.

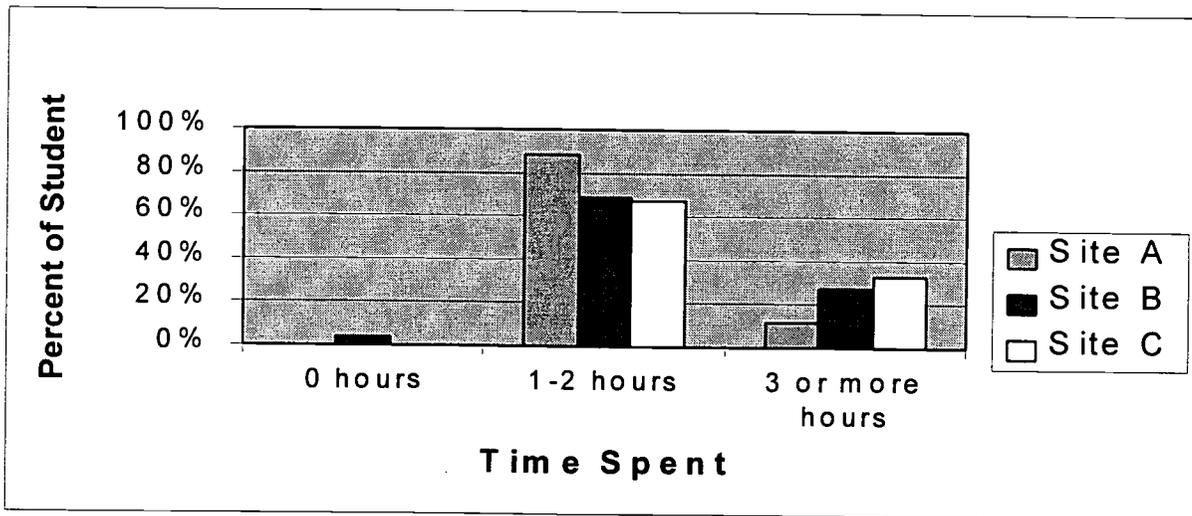


Figure 4. Daily television viewing by children

A survey of student reading habits was given to the students in grades three (Site A), five (Site B), and six (Site C) in the targeted classes. The survey was developed by the teacher/researchers (Appendix B). The students were asked to indicate their age, number of children in their families, their birth order, and if their parents read aloud to them. They were also asked if they owned a library card, the number of minutes they spent reading for pleasure as well as for homework, the number of books they read in the past month, and their favorite genre. Of the 77 surveys distributed, 72 were returned and used. A summary of the students' responses follows.

Based on the information gathered from the Student Survey, the majority of third grade students in the targeted class (Site A) are eight years old, with an equal distribution of males and females. The students reported having at least one sibling, and with exception of two middle children, half are the oldest and half are the youngest members of their family. All students reported that they own a library card, read both for pleasure and for homework, and have read an average number of 13 books in the past month, with their favorite genre being mysteries. Also, three-fourths of the students reported being read aloud to by their parents.

Based on the information gathered from Student Survey, the majority of fifth grade students in the targeted class (Site B) are 10 years old, female, having at least one sibling with approximately one-third being the oldest member of their family. All students reported spending some time reading for homework. Approximately three-fourths reported that they own a library card, read for pleasure and have read an average number of five books in the past month, with their favorite genre being mysteries. Also, three-fourths of the students reported being read aloud to by their parents.

Based on the information gathered from the Student Survey, the majority of sixth grade students (Site C) are 11 years old, with an equal distribution of males and females. The students reported having at least one sibling with approximately one-half being the oldest member of their family. All students reported that they own a library card and that they spent some time reading for homework. However, over one-half of the students reported that they seldom read for pleasure, and have read an average of

four books in the past month, with their favorite genre being mysteries. Also, half of the students reported seldom being read aloud to by their parents.

The student survey was given at the beginning of the school year. The younger students at Site A reported that they are read aloud to more frequently than the students at Sites B and C, suggesting that the age of the students may be a major factor in the time parents read aloud to their children. However, at all three sites, more than 50% of the students reported that their parents do read aloud to them. The data are illustrated in Figure 5.

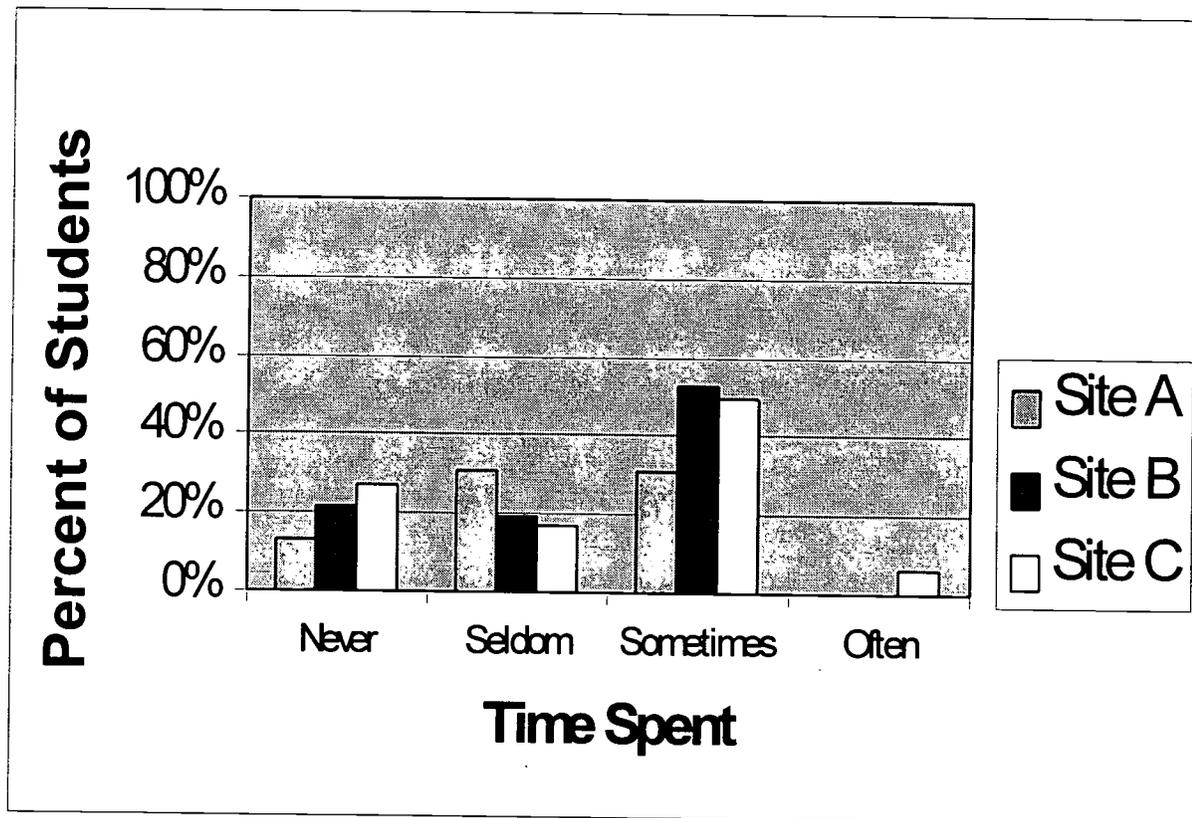


Figure 5. How often parents read aloud

The majority of students at all three sites seldom read for pleasure.

Approximately 15% of the students at Sites B and C reported that they never engaged in any form of reading for pleasure. The data are illustrated in Figure 6.

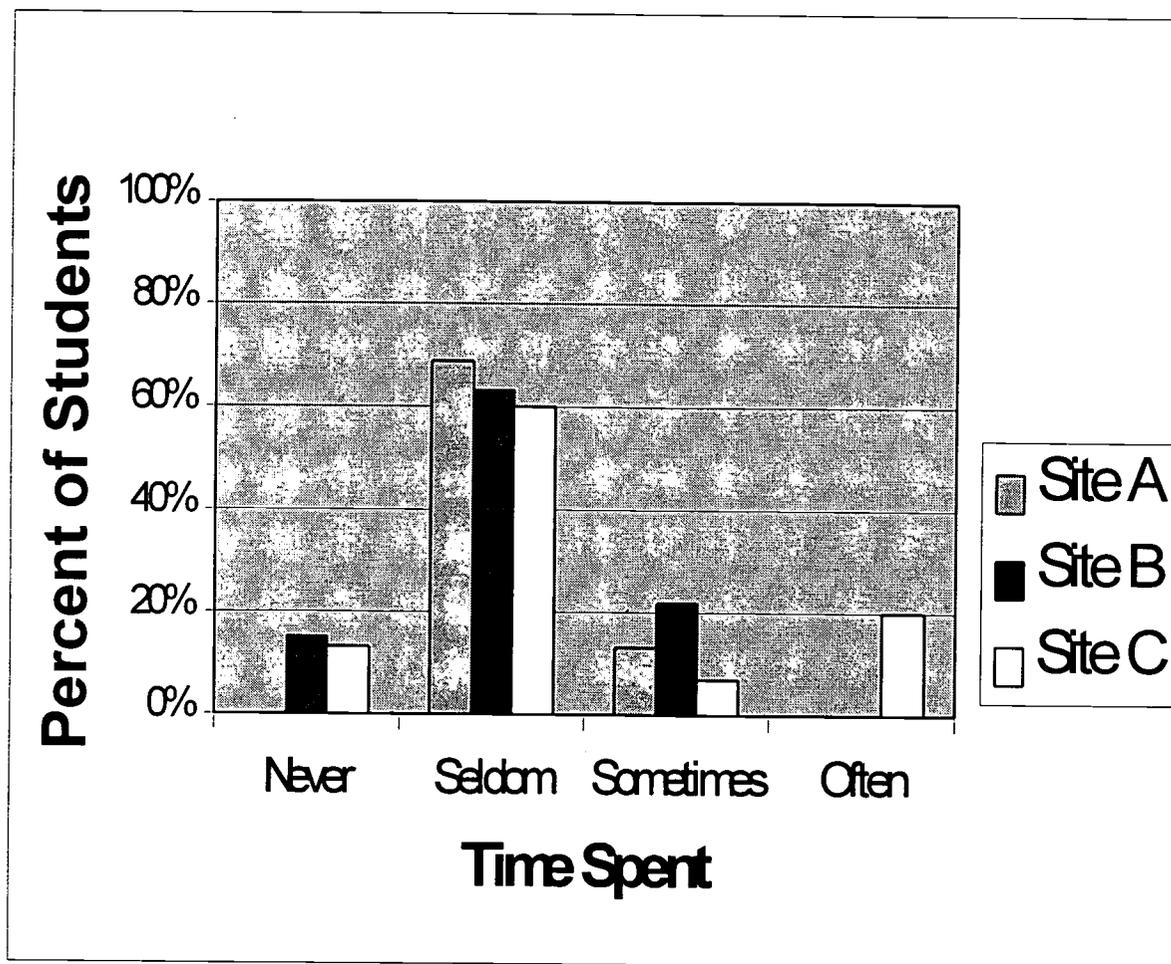


Figure 6. How often you read for pleasure

When asked, “How often do you read for homework?” all students in the targeted classrooms reported that they engage in reading for homework on a daily basis. The teacher/researchers found that the older children at Sites B and C reported spending less than one hour daily reading for homework, suggesting that perhaps the students’ perceptions of what exactly constitutes “reading for homework” may differ from that of the teacher/researchers. The data are illustrated in Figure 7.

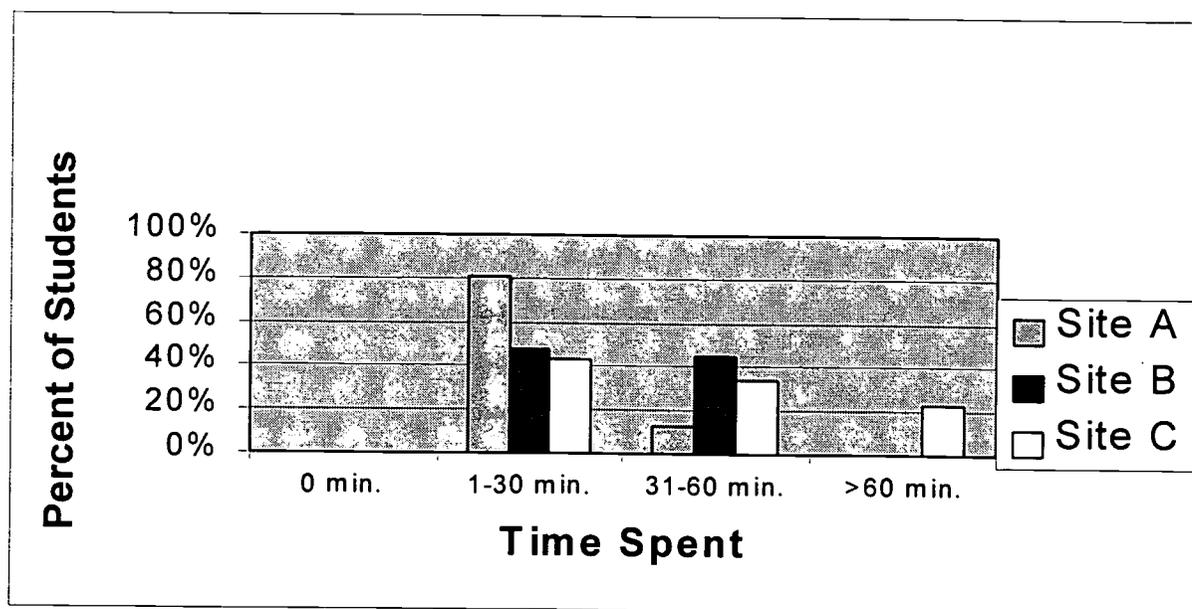


Figure 7. How often you read for homework

A norm-referenced, standardized test of vocabulary and comprehension, the Gates-MacGinitie Reading Test, was administered to the students in grades three (Site A), five (Site B), and six (Site C) in the targeted classrooms to establish a current vocabulary and reading comprehension grade level equivalency score. Survey D, Form Three, was administered to the third, fifth and sixth grade students at all three sites.

During the vocabulary portion of the test, students were given a series of “test words” and asked to underline the one word, from a group of five, which means “most

nearly” the same. Fifty “test words” appeared on the test. Of the 77 vocabulary tests administered, 77 were completed and all scores were used.

The test was administered during the first month of the school year. The majority of students at Site A, 94%, were at or above grade level in reading vocabulary. More than half the students at Sites B and C fell below grade level in reading with vocabulary scores at 64% and 63%, respectively.

During the comprehension portion of the test, students were given a sample paragraph with a number of blanks in it. They were asked to select and underline the one word, from a group of five, that “makes the best sense” for each blank. Twenty-one paragraphs were given with a total of 52 blanks. Of the 77 tests administered, 77 were completed and all scores were used.

The test was administered during the first month of the school year. The majority of students at Site A, 63%, were at or above grade level in reading comprehension. In contrast, the majority of students at Sites B and C scored below grade level in reading comprehension, at 81% and 77%, respectively.

A teacher-made pretest of vocabulary was administered to the students in grades three (Site A), five (Site B), and six (Site C) in the targeted classrooms. Approximately half of the children at Sites A and B and more than three-fourths at Site C scored below 50 on the teacher-made vocabulary.

To summarize, the teacher/researchers found that all students in the targeted classrooms spent more time engaging in television viewing daily, as opposed to time spent reading for pleasure and reading for homework daily. The teacher/researchers also found a discrepancy between the amounts of time parents reported reading aloud

to their children and the amount of time the children reported their parents read aloud to them.

The survey results, coupled with the vocabulary pretest results, suggested that there may be a strong relationship between the children's exposure to print and their socioeconomic status, which in turn may be a determining factor in a child's vocabulary acquisition.

Probable Causes

Students who are not successful in developing early reading skills tend to become frustrated by reading activities, and thus do not engage in the volume of reading necessary to significantly influence their vocabulary development (Baker, Simmons & Kameenui, 1995). This direct link between vocabulary knowledge and reading comprehension greatly impacts academic growth and performance. The literature suggests many causes for inadequate vocabulary development. After analyzing the possible causes, both external and internal causal categories emerged. They were: parental influence (cultural and SES), students' prior knowledge, and deficiencies in instructional strategies.

A careful review of the research indicated that parental influence tends to have the greatest impact on early vocabulary development. During the very first year of life, a vocabulary of how things are done is laid down in interactions with an adult about things that matter. Furthermore, children accumulate both net and proportional amounts of experience hearing their parents use words (Hart & Risley, 1995).

Today's families tend to spend more recreational time watching television than reading. According to the 1994 National Assessment of Educational Progress, the

reason children are unable to read is the influence of TV and a culture that does not foster a love of books. A strong foundation for reading success is formed by talking and reading to children often during the first three years of life rather than allowing them to constantly watch TV (Alexander, 1998). One study contends the average adult TV show and the conversation of college graduates both contain far fewer rich words than children's literature or even a comic book (Rossi, 2000).

Another possible cause for inadequate vocabulary development may be socioeconomic status. In their 1995 study, Baker, Simmons and Kameenui found that children's vocabulary growth appeared to differ on the basis of SES.

In a related study performed by Hart and Risley (1995), families of varying socioeconomic status were observed over a period of one year. In their 1995 book entitled Meaningful Differences, Hart and Risley claim there is a correlation between SES and vocabulary acquisition:

Research has shown us an ever widening gap between the high vocabulary growth rates of professional's/professor's children and the lower vocabulary growth rates of children from families in poverty. The gap seemed to foreshadow the findings from school research that in high school many children from families in poverty lack the vocabulary used in advanced textbooks (p.191). A linear extrapolation from the averages in the observational data to a 100-hour week shows the average child in the professional families provided with 215,000 words of language experience, the average child of a working-class family provided with 125,000 and the average child in a welfare family provided with 62,000 words of language experience (p. 197-198).

Further support for the link between vocabulary development and SES comes from Graves and Slater as cited in Beck & McKeown, 1991. In 1986 they reported that in a domain of 5,044 words, disadvantaged first graders knew approximately 1,800 words, while the middle-income students were familiar with approximately 2,700 words. Additional research on this topic done by White, et al. (1990) indicated important differences in the size of the reading vocabularies of students in the middle SES school (about 4,800 words out of 19,050) compared to students in the two low SES schools (about 3,500 and 2,500 words, respectively).

A child's prior knowledge is a second major factor involved in vocabulary acquisition. Evidence of the importance of prior knowledge was presented by Kintsch and Van Dijk (1978), who claim that prior knowledge of text structure, and general knowledge of the world, are important and necessary for forming macrostructures (Medo & Ryder, 1993). In their own research, Medo and Ryder (1993) found that students with greater background knowledge have better comprehension than students with less background knowledge, regardless of reading ability. Readers who lack sufficient background knowledge for a text are likely to have difficulty making causal connections.

Still other studies have looked only at words of which subjects had no prior knowledge, but then tested for full knowledge of the words. Little vocabulary growth is seen under these conditions. The authors hypothesize that learning from context typically takes place in small increments, so that any one encounter with a word usually results in only a small gain in knowledge of that word (Nagy & Herman, 1984).

Finally, deficiencies in instructional strategies may also cause the inadequate development of vocabulary skills. According to Anderson and Nagy (1991), teaching word meanings in an abstract, decontextualized manner is essentially futile.

Contrary to most instruction, we do not learn most of our words by looking them up in a dictionary. Rather, we learn them in the context of our experiences with listening, speaking, reading, and writing (Hodges, 1984). Students with poor vocabularies need to learn the meanings of words and have the opportunity to use them frequently (Boucher, 1986). Students who are not successful in developing early reading skills tend to become frustrated by reading activities and thus do not engage in the volume of reading necessary to significantly influence their vocabulary development (Baker, Simmons, & Kameenui, 1995).

Nagy, Anderson and Herman (1987) state that three factors determine how much vocabulary a child gains from written context: the volume of the children's exposure to written language, the quality of text, and the child's ability to infer and remember the meanings of new words encountered during reading.

In conclusion, it is necessary to consider the possible causes for inadequate vocabulary development including parental influences, prior knowledge, and deficiencies in instructional strategies, when proposing solutions. Vocabulary is a key to reading comprehension, a top predictor of intelligence, and, say some researchers, a measurement of success in life (Rossi, 2000).

CHAPTER 3

THE SOLUTION STRATEGY

Review of Literature

A review of the professional literature on vocabulary development suggests the following considerations: direct vocabulary instruction, activating prior knowledge, the use of Sustained Silent Reading (SSR), read-alouds, and direct teaching of comprehension skills.

School children appear to increase their vocabulary by thousands of words per year. Many have hypothesized that a large proportion of this growth occurs through incidental learning from written context (Nagy, Herman, & Anderson, 1985).

Since vocabulary knowledge is highly correlated to comprehension, students can develop rich vocabularies that increase their critical literacy, resulting in successful comprehension, when teachers provide them with strategies that they select and apply independently (Roberts, 1999).

Vocabulary words are the labels for the concepts and topics in a reader's background knowledge and are thought to play a central role in comprehension (McNeil, 1992). When a reader encounters a word in a text, word associations that allow meaning to be created are activated (McNeil, 1992) and meaning is constructed. Vocabulary is acquired (1) through wide and varied reading; (2) from exposure to

language in schools, at home, in the community; and (3) from explicit vocabulary instruction (Alvermann & Phelps, 1998).

Most educators agree that the best overall strategy for building children's vocabularies is a combination of direct and indirect vocabulary teaching (Coomber, Peet, & Smith, 1998).

Vocabulary Acquisition and Instruction

Educators agree that the acquisition of vocabulary is a critical element for comprehension as well as communication. It has been documented that "children...learn words at a rapid rate" and "may add as many as 3,000 words annually to their reading vocabularies between third and twelfth grades" (Nagy, Anderson & Herman, 1987). Research studying the "strong relationship between word knowledge and reading, has been clearly established since the early part of the 20th century" (Laflamme, 1997). Authors Anderson and Freebody (1981) state that "a strong correlation exists between vocabulary and academic achievement." Many studies on vocabulary instruction and acquisition conclude that vocabulary knowledge is a major factor influencing reading success (Beck, Perfetti, & McKeown, 1982; McKeown, Beck, Omanson, & Perfetti, 1983; McKeown, Beck Omanson, & Pople, 1985). Some researchers go so far as to claim "vocabulary knowledge as the single most important factor in reading comprehension" (Laflamme, 1997). If this information is true, then it must be also true that teaching a large number of vocabulary words is an important part of any reading program (Gauthier, 1991).

But what is the most effective way to teach vocabulary words to students? Researchers and teachers cannot seem to agree. However, according to Klesius and

Searls (1991), effective vocabulary instruction should involve both direct and indirect teaching methods; instruction should incorporate both direct and indirect teaching methods within the context of reading and literature (Dole, Sloan, & Trathen, 1995). With direct teaching methods, the teacher explicitly introduces the vocabulary and provides the definitions. With indirect teaching methods, on the other hand, a teacher provides various activities that lead students to specific outcomes (Klesius & Searls, 1991).

As students learn to read 3,000 to 4,000 words each year, it quickly becomes clear that most of the words students learn are not taught directly (Roberts, 1999).

Prior Knowledge

It is generally accepted that students learn vocabulary more effectively when they are directly involved in constructing meaning rather than in memorizing definitions or synonyms (Smith, 1997). Recent research has shown that vocabulary instruction prior to reading improves comprehension. Furthermore, for comprehension to take place, a reader must form strong, coherent mental representations of text. The reader assesses prior knowledge, makes inferences, and then makes causal connections (Medo & Ryder, 1993).

Christen and Murphy contend that research clearly emphasizes that for learning to occur, new information must be integrated with what the learner already knows (2000).

Instruction in new vocabulary should serve to activate previous conceptual associations and to provide new associations that help students relate unfamiliar concepts to familiar ones (Wixson, 1986). Word study should be integrated with prior

knowledge, and with learning in the content areas, in order to assist pupils in vocabulary development (Ediger, 1999).

Prior knowledge of text structure and general knowledge of the world are important and necessary for forming macrostructures. Students with greater background knowledge have better comprehension of text rather than students with less background knowledge, regardless of reading ability. Readers who lack sufficient background knowledge for a text are likely to have difficulty making causal connections (Medo & Ryder, 1993).

It appears that when readers lack the prior knowledge necessary to read, three major instructional interventions need to be considered: (1) teach vocabulary as a prereading step; (2) provide experience; and (3) introduce a conceptual framework that will enable students to build appropriate background for themselves. Research on enriching background knowledge has demonstrated that activating such knowledge increases comprehension (Christen & Murphy, 2000).

The most important factor in learning from context is the degree to which the reader can integrate information in a passage into a coherent system consistent with his or her prior knowledge. In their study involving third, fifth, and seventh graders, Nagy, Anderson and Herman found there was a very high correlation between subjects' prior knowledge of the target words and their performance on the given multiple choice test (1987).

Other studies have looked at words of which subjects had no prior knowledge, but tested for full knowledge of the words. Little vocabulary growth is seen under these conditions. If a subject starts with no prior knowledge of a word, a single exposure to

the word in context is not likely to produce a level of knowledge sufficient for the subject to demonstrate knowledge of the word on any but the easiest tests (Nagy, Anderson, & Herman, 1987).

When words and their meanings are not understood, students become frustrated and often have comprehension problems (Graves, Juel, & Graves, 1998). As a result, the teachers agreed that vocabulary problems cause comprehension difficulties and interfere with motivation to read for many upper elementary grade students (Roberts, 1999).

Generally, what pupils are able to discuss represents meaningful subject matter. The subject matter might then provide the necessary knowledge, prior to reading, which helps pupils to understand increasingly complex vocabulary (Ediger, 1999).

Teachers should include what students already know, that is, their prior knowledge, when initiating and implementing vocabulary development in the classroom. Content learning becomes more relevant to the learner as the content can be connected to what is already known. Helping students perceive a direct link between what they are learning and their prior knowledge enhances their comprehension and retention of what is learned. In addition, this promotes relevance and meaningful instruction (Misulis, 1999).

Brandsford and Johnson suggest that knowledge of word meaning increases if the new word is incorporated into the students' existing cognitive schemes (as cited in Jiganti & Tindall, 1986).

Sustained Silent Reading

Multiple encounters with a word in a variety of meaningful contexts are necessary to produce the depth of word knowledge that will measurably increase comprehension during subsequent reading. Learning from exposure is clearly dependent on relationships among concepts being made clear, and it may take repeated exposure not just to the words but to the system of ideas in a new domain to produce a significant level of incidental learning. Regular, wide reading must be seen as the major avenue of large-scale, long-term vocabulary growth. Children learn most new words incidentally from context while reading, and, of course, while listening (Jenkins & Dixon 1983; Jenkins, Stein, & Wysocki, 1984; Nagy & Anderson, 1984; Nagy, Herman, & Anderson, 1985).

The most effective way to increase vocabulary growth is to get children to do a lot of reading of good texts. Incidental learning of word meanings does take place during normal reading. If a student reads 15 minutes a day in school at 200 wpm, 200 days per year, 600,000 words of text would be covered. If children are given texts they can comprehend, they will gain some knowledge about the meanings of some unfamiliar words (Nagy, Anderson, & Herman, 1987).

Students are to be encouraged to read more frequently, both in and out of school, to increase their vocabulary (Mason, Herman, & Au, 1991 and Roberts, 1999). One type of free reading program which has been found to be successful is sustained silent reading (SSR). A study of 27 countries that engaged in SSR found a steady upward trend in achievement for those who used the greatest amount of free voluntary reading. In one longitudinal study, students who participated in a free reading program

in their school were reading more books – as many as six years later – compared with their counterparts from the comparison school in which no free reading program was offered (Pilgreen, 2000).

Alvermann and Phelps (1998) offer guidelines for vocabulary instruction, which include providing numerous exposure to new words and concepts and using a variety of activities for teaching vocabulary.

Incidental learning from context during free reading is the major mode of vocabulary acquisition during the school years (Nagy, Herman, & Anderson, 1985).

In order for words to be truly learned, they must be reinforced many times in meaningful ways (Misulis, 1999). Learning words well requires multiple exposures to those words. If students are to build vocabularies so that they can later recognize the words they are encountering, they need more reinforcement than what comes with a single encounter in their reading (Coomber et al., 1998).

Reading Aloud

Probably the most critical benefit of all those hours of reading stories to our children is that the child gains knowledge of things, people, and places that he is less likely to acquire from any other source. Children learn about what reading is from observing others read to them. Reading aloud increases background knowledge, builds vocabulary, and familiarizes children with the language in books (Hall & Moats, 2000).

Teachers should read aloud so students can hear the sounds of language. This, in turn, will enrich their response (Squire, 1994, as cited in Indrisano and Chall, 1995). Young children can learn vocabulary from listening to carefully chosen illustrated storybooks read aloud to them (Elley, 1989). Reading aloud seems to result in large

gains in vocabulary learning and it is thoroughly enjoyed by students (Elley, 1989). Each day the teacher should read aloud to pupils during story time. Reading cooperatively in small groups can provide much enjoyment and interest in literature. Small groups of three or four pupils may follow along in their own books as the sequential oral reading takes place (Ediger, 1999).

Other Methods

Oral language continues to be a source for the acquisition of vocabulary beyond the preschool years. Oral contexts continue to play the major role in vocabulary learning throughout the school years (Beck & McKeown, 1991).

The following four statements can be made about the effects of vocabulary instruction on word learning:

1. All instructional methods produce better word learning than no instruction.
2. No one method has been shown to be consistently superior.
3. There is advantage from methods that use a variety of techniques.
4. There is advantage from repeated exposure to the words to be learned (Beck & McKeown, 1991, p. 805).

Reading Comprehension and Vocabulary

In studies of reading comprehension, vocabulary knowledge has consistently emerged as a major component, correlating very highly with comprehension ability. The presence of difficult vocabulary does diminish text comprehension (Beck & McKeown, 1991).

Mezynski (1983) reviewed eight studies and concluded that three features seemed to differentiate those that succeeded in improving comprehension. These were

(1) amount of practice; (2) breadth of information about the words; and (3) activities that encouraged active processing of information. Specifically, they found that successful instruction provided more than one or two exposures to each word, presented both definitional and contextual information, and engaged students in deeper processing (Beck & McKeown, 1991).

Semantic features analysis (SFA) and semantic mapping are two instructional techniques that engage active processing by having students examine how words are related. SFA yields improvements in reading comprehension. Semantic mapping instruction aims to tie new words into networks of related known words by making explicit the shared and unique features of members of a group. Margosein et al. found that semantic mapping instruction resulted in improved comprehension (as cited in Beck & McKeown, 1991). From these findings, we can speculate that the effect of vocabulary instruction on comprehension may seem small when measured in quantitative ways, but its significance may be revealed when the quality of understanding is considered (Beck & McKeown, 1991).

Organizing words and recognizing relationships between words help students retain the words in their long-term memory. Creating visual images, understanding word origins, and recognizing special features within words such as multiple meanings and connotations provide students with the opportunity to relate personally to words in meaningful contexts (Roberts, 1999).

It can be highly profitable for pupils individually or in committees to develop their very own dictionaries to increase vocabulary and deepen comprehension. There are

many new words brought into a lesson or unit of study by the teacher. It is good to alphabetize these new words and write meaningful definitions for each (Ediger, 1999).

Comprehension skills that promote independent learning of vocabulary words and their meanings include knowledge and use of context clues, structural analysis (prefixes, suffixes, root forms, syllabication skills), and dictionary skills (Conley, 1995; Herber, 1978 as cited in Misulis, 1999). Prefixes and roots are especially important in vocabulary instruction because they affect the meaning of a word; suffixes affect the part of speech and thus the way a word may be used in a sentence. By using context and word structure together, students can learn to unlock the meanings of many difficult words (Coomber et al., 1998). As students read printed materials, they use a variety of context clues to determine the meanings of unfamiliar words. Research indicates that their use of these context clues can be improved by direct instruction (Pittelman, Heimlich, Berglund, & French, 1991).

Several types of reinforcement activities that might be used within content instruction include matching exercises, multiple choices exercises, word puzzles, writing activities, classification or categorizing activities, analogies, games, demonstrations or performance-types of activities and projects that require use of the vocabulary words (Misulis, 1999).

Vocabulary instruction can increase comprehension, but such an effect is found only when the instruction provides rich experiences with words (Baumann & Kameenui, 1991; Beck & McKeown, 1991; Stahl, 1986), at very least both definitional and contextual information (Stahl & Fairbanks, 1986 as cited in Scott & Nagy, 1997). What levels of processing research tells us is that vocabulary study will be more productive if

learners are actively involved with the words they are learning. The more active the learner, the more he retains (Coomber et al., 1998).

The body of research discussed here seems to indicate that the best way to reach the goal of increasing vocabulary and comprehension is to help students add to their repertoires both specific words and skills that promote independent learning of words, and also, to provide opportunities from which words can be learned. Based on this examination of the literature, the teacher/researchers developed the following Action Plan.

Project Objectives

As a result of direct and indirect vocabulary teaching during the period of September, 2000 to December, 2000, the targeted students in grades three, five, and six will increase their vocabulary knowledge as measured by the teacher-made pre and post tests, and thus increase their reading comprehension, as measured by the Gates-MacGinitie pre and post test.

In order to accomplish the project objective, the following processes are necessary:

1. Students will read for a minimum of ten minutes each day and keep a record, or log, of their reading.
2. Students will be exposed to additional vocabulary, and hear teacher model the finding the meanings of words in context, by listening to stories read aloud by the teacher/researcher at least three times each week.
3. Students will learn to use context clues to find the meanings of unfamiliar words by using literature as a basis for learning new words.

4. Students will develop word attack skills and be exposed to the meaning of prefixes and suffixes.
5. Students will engage in a number of activities that will provide them with the opportunity to practice the words taught. Such activities include working crossword puzzles, doing word searches, creating a picture dictionary, and playing games that focus on the new words.
6. Teacher/researchers will connect the new vocabulary to students' prior knowledge and experiences throughout the intervention time.

Project Action Plan

The teacher/researchers at the targeted sites will try to increase the vocabulary knowledge of their students by implementing the following intervention strategies at their respective sites:

1. Parental permission slips for participation in the research project will be sent to homes of targeted students in September.
2. Parent and student surveys will be distributed and data collected and analyzed in September.
3. The Gates-MacGinitie Vocabulary Test will be administered to all targeted students in September.
4. A teacher-made vocabulary test will be administered to all targeted students in September.
5. Students will engage in ten minutes of sustained silent reading a minimum of three times per week from September through November.

6. Students will be exposed to teacher modeling by listening to stories read aloud to them for a period of ten minutes at least three times per week from September through November.
7. Students will practice their new vocabulary words by completing crossword puzzles, playing games and completing practice activities that are age appropriate from September through November.
8. Teacher-created vocabulary posttests will be administered in November to determine vocabulary growth.
9. Gates-MacGinitie posttest will be administered in November to measure growth in comprehension.
10. Data from tests will be analyzed in December
11. Findings will be analyzed and synthesized in December.

Methods of Assessment

In order to assess the effects of the interventions, pre and posttests in vocabulary and comprehension will be administered. In addition, examples of students' reading logs and teacher/researcher logs will be utilized also. Student reactions to the project will be gathered at the conclusion of the read-aloud novel. Samples of student picture dictionaries and daily work will be studied to gather data to assess growth in vocabulary development.

CHAPTER 4

PROJECT RESULTS

Historical Description of the Intervention

The primary objective of this Action Plan was to increase students' vocabulary knowledge in the targeted third, fifth, and sixth grade classrooms. Students were exposed to a variety of literature and given opportunities for meaningful practice of vocabulary they encounter daily. This plan was designed to promote students' vocabulary growth through a variety of experiences including extensive opportunities with reading. Implementation strategies for the intervention included Sustained Silent Reading (SSR), increased exposure to vocabulary in contexts, read alouds, as well as direct and indirect instruction techniques.

The Action Plan was placed in effect beginning September 2000. Surveys were developed and distributed to parents of students in the targeted third, fifth, and sixth grade classes regarding their attitudes, involvement and reading practices with their child at parent orientation. Following a parent orientation, the targeted students were asked to complete a survey reflecting their attitudes about reading and their recreational activities. Results were compiled from the two individual surveys.

Prior to the implementation of the intervention, students were given a Gates-MacGinitie Vocabulary and Comprehension Test to establish grade equivalent baseline scores. Teacher/researchers also created and administered teacher-made vocabulary

tests containing vocabulary from the predetermined grade-appropriate novels, which would be used as part of the intervention, and from the class novel and read-aloud selections.

Throughout the implementation period, teacher/researchers attempted to connect the new vocabulary to students' prior knowledge and experiences by assisting students generate a list of existing knowledge about the topic, and by creating story maps and topic webs. In addition, throughout the intervention, each child participated in Sustained Silent Reading for ten minutes daily by selecting a book of interest for their silent reading time and keeping a reading log of their progress (Appendixes F & G). Also, teacher/researchers read aloud for approximately 15 minutes, a minimum of three times per week. The teacher/researchers selected novels for read-alouds, as well as class study based on reading themes, author exposure, grade appropriateness and student interest (Appendixes H & I).

During the implementation of this Action Plan, students were instructed in the use of context clues to find the meaning of unfamiliar words. Students were given instruction in word attack skills with a focus on determining the meaning of unfamiliar words using prefixes and suffixes. Students also engaged in a number of activities that provided opportunities for practicing vocabulary words. Such activities included crossword puzzles, word searches, creating picture dictionaries and playing games that focused on the new words.

At the conclusion of the intervention, the Gates-MacGinitie Comprehension Test was again administered to the students in the targeted third, fifth, and sixth grade classrooms as a posttest. The teacher/researcher-made vocabulary test was also

given. These tests were administered to reflect any gains made by students in the targeted classrooms in vocabulary and comprehension during the implementation of the intervention.

During the implementation of this Action Plan, a number of students who were initially involved in the research project were unable to complete the study due to excessive absences or transfers from the targeted classrooms. Of the original 72 students participating, 65 were present throughout the entire project, which concluded November 2000, and were included in the results.

Presentation and Analysis of Results

Two objective methods of assessment were used to measure the effects of the project implementation. One of these methods was the teacher-made vocabulary tests given to demonstrate vocabulary knowledge. The vocabulary words on these tests were pre-selected by the teacher/researchers based on the novel being read by the students in the targeted grade levels, as well as the read-aloud selections. Figure 8 presents the gains achieved in vocabulary at the targeted sites.

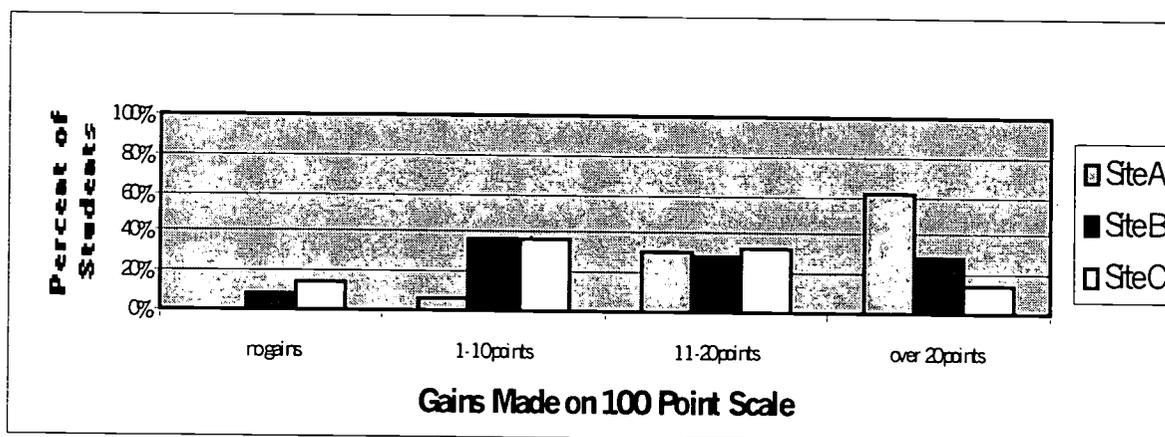


Figure 8. Posttest gains on teacher-made vocabulary assessment

Results indicated that more than 80% of the students increased their vocabulary knowledge. All students at Site A made gains, with over 60% achieving an increase of more than 20 points, on a scale of 1 to 100. At site B, over 90% of all students made gains, with more than half making gains of 11 points or better. At Site C, over 80% of all students made acquisition progress in vocabulary, with 70% making gains in the 1 to 20 point range.

The second method of assessment was the Gates-MacGinitie Comprehension Test, given to determine students' reading growth and understanding. Figure 9 presents the gains made in comprehension at the targeted sites.

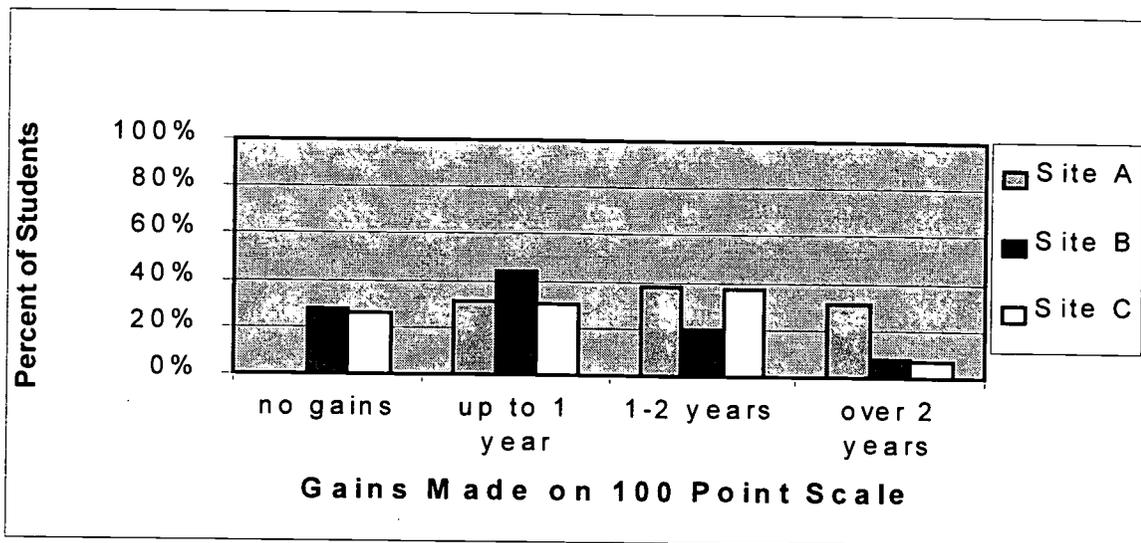


Figure 9. Gates Mac-Ginitie Comprehension Posttest

This graph shows the various percentages of growth made by students in the targeted classrooms during the implementation of the Action Plan. The data collected indicated that more than 70% of the students showed some growth in comprehension, with the largest gains being made at Site A. At Site A, all students demonstrated growth, with the largest percentage of student growth being from one to two years. At

Site B, the largest gains were made in the one to two year category. All three sites had some students with gains of over two years.

Conclusions and Recommendations

Based upon the presentation and analysis of the data compiled during the implementation of the Action Plan, teacher/researchers concluded that the combination of strategies used was effective because gains in vocabulary and comprehension were made at all three sites. Research demonstrates a correlation between socioeconomic status (SES) and students' vocabulary and comprehension growth. Researchers in the present study also found SES to be a possible contributor to vocabulary development. As seen in Table 1, the school/site data tend to support that students with the highest SES had the most vocabulary growth. The targeted students at Site A, for example, had the highest SES, with no students participating in the Free or Reduced Lunch Program. Students at this site demonstrated the highest gains in vocabulary and comprehension. In comparison to Site A, Site B had 92% and Site C had 67% of the students participating in the Free or Reduced Lunch Program. Students at these sites made more moderate gains in vocabulary and comprehension.

Table 1

Students Who Qualify for Free or Reduced Lunch Program

Site	Free Lunch	Reduced Lunch	Full Lunch
A	0%	0%	100%
B	76%	16%	8%
C	52%	15%	33%

In a comparative examination of post vocabulary and comprehension tests, teacher/researchers concluded that although the intervention focused mainly on vocabulary growth and development, gains were also noted in comprehension.

Results from this study suggest that certain steps can be taken that could result in significant gains in vocabulary development in the elementary grades. Numerous and various opportunities for vocabulary practice must be offered in order to meet the needs of as many students as possible. The implementation of the program must become part of a daily routine in order for significant gains to be apparent. The combination of activities must be well-planned and well-executed.

To increase and strengthen students' vocabulary knowledge, and as a by-product, their reading comprehension, teachers' efforts must remain on-going and relevant. There must be a clear and concise plan that not only provides instruction in vocabulary skills, but also must provide constant reinforcement and monitoring of previous activities and skills.

In order for a vocabulary intervention to reach its full potential, a school-wide vocabulary program would need to be developed and implemented. Teacher/researchers' recommendations would include a school-wide Sustained Silent Reading (SSR) Program, the development of classroom libraries, teachers reading

aloud to their students on a consistent basis, and the use of novels. To be successful, proper staff development as well as peer collaboration and periodic evaluation is strongly recommended. If a school-wide vocabulary program had been in place prior to this project, greater gains may have been noted as students progressed through the elementary grades.

Overall, the results of this project were very encouraging. Participating students benefited from this intervention. The teacher/researchers plan to continue to use the intervention strategies used in this study. Chicago Sun-Times Education reporter Rosalind Rossi reports that “vocabulary is a key to reading comprehension, a top predictor of intelligence and even a barometer of success in life.” Our goal was and continues to be to inspire our students’ enthusiasm and involvement in daily reading, therefore allowing them to be successful in life.

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Appendices

Appendix A

Parent Survey

Please circle each answer that applies.

1 How many hours do you read each day?

0 1 2 3 or more

2. How many hours daily do you read to your child?

0 1 2 3 or more

3. When do you read to your child?

never school nights weekends both

4. When did your child start reading?

before kindergarten in Kindergarten 1st grade or beyond

5. Do you subscribe to any magazines?

Yes No Please list

6. Do you buy the newspaper? Circle all that apply.

Never Daily Saturday Sunday

7. How many hours of television does your family watch daily??

Adults	0	1 - 2	3 or more
Children	0	1 - 2	3 or more

8. Given a choice please choose how your child would spend his /her spare time?

(1 for most preferred 2 for least preferred)

_____ participates in sports	_____ reading
_____ playing video games	_____ using the computer

9. For each activity below circle how often your family does them together.

Visit museums	Never	Weekly	Monthly	Yearly
Visit the library	Never	Weekly	Monthly	Yearly
Visit zoos	Never	Weekly	Monthly	Yearly
Take nature walks	Never	Weekly	Monthly	Yearly
Play Board games	Never	Weekly	Monthly	Yearly



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Appendix B

Student Survey

Age _____ Male Female

Number of children in your family _____

Circle each answer

Oldest child middle child youngest child

Do you own a library card? yes no

Do you read other than for school?

never seldom sometimes often

Do your parents read aloud to you?

never seldom sometimes often

How much time do you read daily for pleasure?

0 1 - 30 mins. 31-60 mins. Over 60mins

How much time is spent daily reading for homework?

0 1 - 30 mins 31 - 60 mins over 60mins.

Complete

List the number of books you have read in the last month. _____

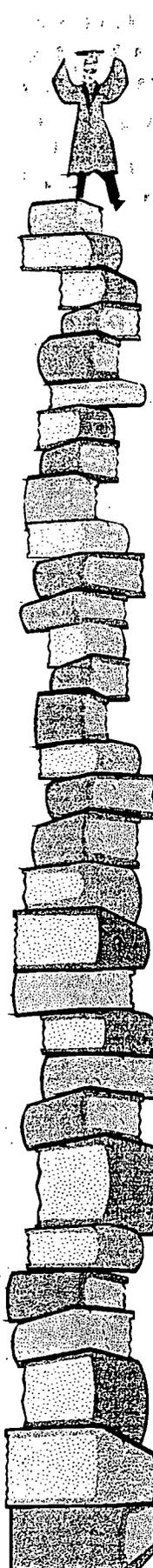
Name your favorite author _____

Place a check to next to the types of materials you enjoy reading. Check all that apply

_____ comic books _____ mysteries _____ biographies

_____ autobiography _____ animal books _____ fairy tales

_____ picture books _____ magazines _____ newspapers



Appendix C

Site A Teacher-Made Vocabulary Test

Charlotte's Web Vocabulary Test

1. Runt:	smallest	noise	sickness	food
2. Vanished:	veins	awakened	lost	disappeared
3. Peered:	peeled	looked	liked	sick
4. Captivity:	imprisoned	release	hairdo	closed
5. Slops:	messy	sick	funny	leftovers
6. Glutton:	overeater	food	number	gutter
7. Ridged:	ripped	stiff	bumpy	smooth
8. Oblige:	control	overeat	open	accommodate
9. Vague:	unclear	clear	happy	colorful
10. Radiant:	sorry	real	rodent	rays
11. Exertion:	rest	expand	extend	strain
12. Idiosyncrasy:	mannerisms	dumb	ideal	eyeglasses
13. Alders:	trees	flowers	always	acne
14. Monotonous:	changes	many	danger	unvarying
15. Secure:	danger	secretive	sensitive	safe
16. Commotion:	excitement	calm	shaking	sleepy
17. Gorge:	empty	stuff	cold	greenish
18. Carousing:	celebrating	caring	catlike	carousel
19. Humble:	excited	hot	modest	boastful
20. Retorted:	real answer	take again	sharp reply	sharp angle

21. Hysterics:	uncontrolled laughter	sick stomach	funny man	high style
22. Aeronaut:	moon rock	balloon pilot	high jumper	arrow nut
23. Descended:	went up	went down	don't like	silly directions
24. Radial:	turned over	center outward	inside out	really sick
25. Indigestion:	inside entry	not doing	stomach ache	good health

Appendix D

Site B Teacher-Made Vocabulary Test

This is a test of your vocabulary knowledge. You are to circle the synonym or the word most closely related to the given word. (A synonym is a word that means the same thing).

Example: toy a) block b) boy c) parent

The correct answer is a, so circle block.

You will have 15 minutes to complete this test.

- | | | | |
|------------------|---------------|--------------|------------------|
| 1. crouched | a) bent | b) upright | c) practical |
| 2. despised | a) liked | b) hated | c) complimented |
| 3. endure | a) prefer | b) fail | c) last |
| 4. peculiar | a) common | b) odd | c) correct |
| 5. squinted | a) measured | b) gawked | c) cross-eyed |
| 6. thrashed | a) beaten | b) cuddled | c) claimed |
| 7. scorching | a) burning | b) pain | c) extinguished |
| 8. abruptly | a) smoothly | b) suddenly | c) clearly |
| 9. conspicuous | a) fancy | b) clear | c) hidden |
| 10. distribution | a) allotment | b) accident | c) keep |
| 11. ominously | a) determined | b) favorable | c) threateningly |
| 12. retreating | a) separating | b) advancing | c) departing |
| 13. repulsive | a) ugly | b) quick | c) beautiful |
| 14. vigorously | a) pleasant | b) actively | c) dull |
| 15. spectacle | a) notable | b) lucky | c) ordinary |
| 16. sporadically | a) randomly | b) lazy | c) always |
| 17. assuring | a) angry | b) denial | c) accepting |
| 18. chaos | a) order | b) confusion | c) possibility |
| 19. cremated | a) busy | b) reborn | c) burned |

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|-------------------|---------------|----------------|---------------|
| 20. dredging | a)bringing up | b)hidden | c)healthy |
| 21. objection | a)protest | b)agreement | c)celebration |
| 22. retrieved | a)favorite | b)last | c)regained |
| 23. traitorous | a)cheerful | b)worker | c)disloyal |
| 24. wardrobe | a)beach | b)closet | c)hallway |
| 25. scarlet | a)blank | b)brown | c) red |
| 26. inquisitive | a)nosy | b)uninterested | c)scary |
| 27. beckoned | a)called | b)sent | c)studied |
| 28. earnestly | a)generous | b)serious | c)insincere |
| 29. dispute | a)squabble | b) agreement | c)friends |
| 30. dismay | a)encourage | b)horror | c)mail |
| 31. siege | a)country | b)takeover | c)release |
| 32. greedily | a)generously | b)selfishly | c)happily |
| 33. hopeless | a)desperate | b)promising | c)careful |
| 34. misinformed | a)unknown | b)knowledge | c)news |
| 35. invisible | a)evident | b)unseen | c)shaking |
| 36. irresponsible | a)dependable | b)perish | c)unreliable |
| 37. alcove | a)plane | b)mansion | c)nook |
| 38. annoyance | a)deposit | b)bother | c)convenience |
| 39. crimson | a)red | b)black | c)white |
| 40. distracted | a)sadden | b)watchful | c)preoccupied |
| 41. exiled | a)expelled | b)protest | c)welcomed |

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42. prey a)ruler b)audience c)victim
43. smirked a)grinned b)broke c)cried
44. surplus a)train b)extra c)want
45. canopy a)vegetable b)awning c)doorway
46. compacent a)distract b)unhappy c)pleasing
47. suppress a)reduce b)increase c)locate
48. intently a)before b)accidentally c)purposely
49. muffled a)softened b)direct c)louder
50. repented a)joined b)regretted c)glad

Appendix E

Site C Teacher-Made Vocabulary Test

Hatchet Vocabulary Test

Name _____

Circle the word that means nearly the same as the given word.

- | | | | | |
|-----------------------|----------------|--------------|-------------|-----------|
| 1. traversing | flying | sailing | moving | expanding |
| 2. abated | grew | faded | played | escaped |
| 3. depress | pull | tie | push | twist |
| 4. frustration | disappointment | satisfaction | fulfillment | surprise |
| 5. banked | turned | declined | sank | deposited |
| 6. crevasse | glacier | fissure | mountain | bridge |
| 7. massive | small | round | spring | enormous |
| 8. motivated | discouraged | inspired | depressed | stumped |
| 9. ruefully | gladly | willingly | stubbornly | sadly |
| 10. interlaced | unraveled | interwoven | untangled | released |
| 11. receded | subsided | increased | advanced | displayed |
| 12. stranded | rescued | calmed | marooned | hidden |
| 13. asset | handicap | advantage | drawback | luck |
| 14. gingerly | carelessly | carefully | sloppily | harshly |

15. depression	happiness	clinging	rejoicing	melancholy
16. dormant	awake	inactive	working	welcome mat
17. persistent	ceaseless	sporadic	intermission	important
18. belay	secure	hike	build	expand
19. primitive	civilized	barbaric	cultured	modern
20. exasperation	calmness	peacefulness	aggravation	tranquility
21. piton	metal spike	hunting net	mountain sickness	water tube
22. infuriating	satisfying	cunning	irritating	fixing
23. stabilize	steady	remove	reflex	customize
24. fragile	sturdy	active	rugged	delicate
25. impaired	mended	repaired	harmed	cleared
26. precise	exact	indefinite	careless	unmeticulous
27. frenzied	calm	relaxed	bored	energetic
28. stymied	enlightened	learned	baffled	infected
29. unwittingly	intentionally	accidentally	knowingly	playfully
30. crampon	clasp	salad topping	spiked shoe plate	ski mask

Appendix H

Read Aloud List

Teacher Selections for Read Aloud Novels

The following is the list of books the teachers read to their classes during the intervention. The selection process is also stated.

Site A: Mr. Popper's Penguins by Richard and Florence Atwater
The book inspires us to reach our highest ideals as well as followed our geography study of Antarctica.

Site B: The Lion, the Witch and the Wardrobe by C. S. Lewis
A selection from the Chronicles of Narnia is presented in the basal reader and the novel provides opportunity to practice prediction skills.

Site C: Within Reach My Everest Story by Mark Pfetzer & Jack Galvin
The theme of survival is carried out in both the class novel, as well as, through this read aloud selection.

Appendix I

Class Novel List

Class Novels

The following is the list of books selected at each site for use as a reading text during the intervention. The criteria which determined their use is also stated.

Site A: Charlotte's Web by E. B. White

The book demonstrates the importance of friendship. It was reading level appropriate.

Site B: Bridge to Terabithia by Katherine Paterson

A Newberry Award winning book which deals with fifth graders as the main characters, thus something the students can relate to. Previous students remark it is one of their favorite novels.

Site C: Hatchet by Gary Paulsen

The theme of survival is presented in the basal reader and this novel correlates with that theme.



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