This report describes a program to increase sight/functional vocabulary to improve reading comprehension. The targeted population consisted of one 2nd-3rd grade and one 6th-8th grade cross-categorical self-contained class, located in an elementary school and a middle school. The schools were located in a northeast suburb of a major city in the Midwest. The problem of inadequate recognition of sight/functional vocabulary and its impact on comprehension was documented with parent, teacher, and student surveys, daily assignments, tests, and checklists. Analysis of probable cause data indicated that school environment played a role in the inability of students to acquire this vocabulary. Inadequate time spent on meaningful learning experiences hindered the comprehension required for long-term recall. Parental support was often lacking, which contributed to the children's deficits. A review of the solution strategies suggested by other researchers, combined with an analysis of the problem setting, resulted in the implementation of the following intervention strategies: thematic/functional word walls, the Edmark Reading Program, Home Reading Logs, Dolch Sight Word Wall, a Survival Signs Program, calendar activities, vocabulary games, and community-based field trips. More intervention techniques were needed to improve basic reading sight vocabulary. However, post intervention data indicated that the students improved their knowledge and recognition of functional environmental signs. (Contains 53 references, and 13 tables and 3 figures of data. Appendixes contain student, parent, and teacher survey instruments.) (Author/RS)
A STUDY OF IMPROVING SIGHT AND FUNCTIONAL VOCABULARY DEVELOPMENT AND COMPREHENSION

Diane Henning
Anita Pickett

An Action 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 in Teaching and Leadership

Saint Xavier University & Skylight Professional Development Field-Based Masters Program

Chicago, Illinois
May, 2000

BEST COPY AVAILABLE
This project was approved by

Amy Johnson, Ph.D.
Advisor

Samantha Marsha
Advisor

Beverly Giddens
Dean, School of Education
ABSTRACT

This report describes a program to increase sight/functional vocabulary to improve reading comprehension. The targeted population consisted of one 2nd-3rd grade and one 6th-8th grade cross-categorical self-contained class, located in an Elementary School and a Middle School. The schools were located in a northeast suburb of a major city in the Midwest. The problem of inadequate recognition of sight/functional vocabulary and its impact on comprehension was documented with parent, teacher and student surveys, daily assignments, tests and checklists.

Analysis of probable cause data indicated that school environment played a role in the inability of students to acquire this vocabulary. Inadequate time spent on meaningful learning experiences hindered the comprehension required for long-term recall. Parental support was often lacking, which contributed to the childrens’ deficits.

A review of the solution strategies suggested by other researchers, combined with an analysis of the problem setting, resulted in the implementation of the following intervention strategies: thematic/functional word walls, the Edmark Reading Program, Home Reading Logs, Dolch Sight Word Wall, a Survival Signs Program, calendar activities, vocabulary games and community-based field trips.

More intervention techniques were needed to improve basic reading sight vocabulary. However, post intervention data indicated that the students improved their knowledge and recognition of functional environmental signs.
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CHAPTER 1

PROBLEM STATEMENT AND CONTENT

Problem Statement

The students of the targeted elementary and middle school self-contained cross categorical special education classes exhibit deficient sight and functional vocabulary recognition and comprehension. Evidence for the existence of the problem includes daily oral reading assignments, daily written assignments, and functional life skill activities.

Immediate Problem Context

The action research study takes place at two separate sites. Site A and Site B are in the same district, but are located in different buildings. They are situated in a far northwestern suburb of a major city. Site A houses 26 sections of grade two and 26 sections of grade three, while Site B houses 26 sixth grades, 26 seventh grades, and 24 eighth grades. White non-Hispanic, Black non-Hispanic, Hispanic, Asian/Pacific Islander, and Native American are the major ethnic-racial groups in the schools. Table 1 shows the racial and ethnic background of the students as well as the total enrollment in both sites. The socioeconomic status of the population is mainly middle class. Site A and Site B have a predominately White population of 81.6% while 4.6% make up the minority population. Low-income students are from families receiving public aid, living in institutions for
neglected or delinquent children, being supported in foster homes with public funds, or eligible to receive free or reduced-priced lunches. Limited-English-Proficient Students are those found to be eligible for bilingual education. Site A and Site B have comparable low income students, while Site A has over twice as many Limited-English-Proficient students (see Table 2).

Table 1
Racial/Ethnic Background and Total Enrollment

<table>
<thead>
<tr>
<th></th>
<th>White</th>
<th>Black</th>
<th>Hispanic</th>
<th>Asian/P.</th>
<th>Native</th>
<th>Islander</th>
<th>Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site A</td>
<td>78.8%</td>
<td>5.4%</td>
<td>8.0%</td>
<td>7.7%</td>
<td>0.3%</td>
<td></td>
<td>1169</td>
</tr>
<tr>
<td>Site B</td>
<td>84.5%</td>
<td>3.3%</td>
<td>7.1%</td>
<td>5.0%</td>
<td>0.1%</td>
<td></td>
<td>1153</td>
</tr>
</tbody>
</table>

Table 2
Low-Income and Limited-English-Proficient Students

<table>
<thead>
<tr>
<th></th>
<th>Low-Income</th>
<th>Limited-English-Proficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site A</td>
<td>6.2%</td>
<td>6.3%</td>
</tr>
<tr>
<td>Site B</td>
<td>5.3%</td>
<td>2.5%</td>
</tr>
</tbody>
</table>

Table 3 compares attendance, mobility, and chronic truancy of Site A and Site B. A perfect attendance rate (100%) means that all students attended school every day. The student mobility rate is based on the number of students who enroll in or leave a school during the school year. Students may be counted more than once. Chronic truants are students who were absent from school without valid cause for 10% or more of the last 180 school days. Site A and Site B have over 96% daily attendance and exhibit no truancy problems. The average mobility rate is 11.7% for the two sites.
The average class size is the total enrollment for a grade divided by the number of classes for that grade reported for the first school day in May (see Table 4). Site A and Site B have comparable class sizes.

Table 3
Attendance, Mobility and Chronic Truancy

<table>
<thead>
<tr>
<th></th>
<th>Attendance</th>
<th>Mobility</th>
<th>Chronic Truancy</th>
<th>Chronic Truants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site A</td>
<td>96.1%</td>
<td>10.9%</td>
<td>0.0%</td>
<td>0</td>
</tr>
<tr>
<td>Site B</td>
<td>95.8%</td>
<td>12.5%</td>
<td>0.0%</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 4
Average Class Size

<table>
<thead>
<tr>
<th></th>
<th>Grade 3</th>
<th>Grade 6</th>
<th>Grade 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site A</td>
<td>22.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site B</td>
<td></td>
<td>23.7</td>
<td>23.9</td>
</tr>
</tbody>
</table>

Time devoted to the teaching of core subjects is the average number of minutes of instruction per five day school week in each subject area divided by five. English includes all language arts courses. Table 5 shows three times more time devoted to teaching English at Site A compared to Site B. At the primary level, this is common in most schools, due to the fact that children need more time to acquire the basic reading skills that make up the foundation for future success in reading. The time devoted to teaching math, science, and social studies is comparable at both sites.
Teacher data in Table 6 include classroom teachers plus other teachers such as those specializing in art, physical education, and music. The table shows average teaching experience, level of education, and average salary. There is a predominance of teachers with Bachelor's Degrees which is probably due to the low average 8.7 years teaching experience. There is a direct correlation between the low number of years of teaching experience and the average teacher's salary.

Table 5
Time Devoted to the Teaching of Core Subjects (Minutes per Day)

<table>
<thead>
<tr>
<th>Grade</th>
<th>Math</th>
<th>English</th>
<th>Science</th>
<th>Social Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site A</td>
<td>60</td>
<td>150</td>
<td>45</td>
<td>45</td>
</tr>
<tr>
<td>Site B</td>
<td>44</td>
<td>44</td>
<td>44</td>
<td>44</td>
</tr>
</tbody>
</table>

Table 6
Teacher Characteristics and Salaries

<table>
<thead>
<tr>
<th>Teachers</th>
<th>Teacher with Bachelor's Degree</th>
<th>Teacher with Master's and Above</th>
<th>Average Teacher Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>District</td>
<td>8.7</td>
<td>59.0%</td>
<td>40.9%</td>
</tr>
</tbody>
</table>

Site A has two self contained classrooms with an average class size of nine students. Site B has four self contained classrooms with an average class size of 12 students. All self contained classrooms have teacher assistants. The students have varied disabilities, such as: Learning Disabilities, Mental
Impairment, Hearing Impairment, Other Health Impaired, Traumatic Brain Injury, Autism, and Behavior Disorders. The students follow the same regular education curriculum which is modified by the teacher based on the student's abilities. A functional program is beginning to be emphasized in the upper grades. The next section will discuss the surrounding community and its' impact on the school district.

The Surrounding Community

The community is located in a northern suburb of a large midwestern city. It is approximately 35 miles from an international airport and close to a major interstate highway system. The district encompasses 35 square miles and is made up of several incorporated and unincorporated subdivisions and small villages. Due to the enormous business and housing development growth spurt in the area over the last decade, it is no longer primarily a rural setting, but rather a mobile, white collar, bedroom community.

By 1995, the district's population had grown 54% since the beginning of the decade. Based on 1995 population projections, the current population is approximately 35,271 (Demographic Analysis, 1990). The district continues to display the same growth patterns in 1999. This growth in population has affected the district in several ways. The district had to ask the voters for a building referendum for a new Middle School, which passed in 1995. After the completion of the new school, the district had to hire 100 new teachers and support staff. In February 1999, the district returned to the voters for an educational referendum, which the community passed.

The new Middle School divided the district geographically.
The other buildings, which consist of 1 Primary, 1 Elementary, and 1 Intermediate, are all located in close proximity of each other on a major street, thus making a campus setting. Property was not available at the original district site for the new building, therefore, it was built approximately one mile north. The administrative offices had to be expanded to two small buildings, one at each site.

Administratively, the district employs five Principals and nine Assistant Principals for four buildings. Along with a Superintendent and an Assistant Superintendent of Business Services, the district employs four directors for Operations, Curriculum and Instruction, Pupil Personnel Services, and Buildings and Grounds. The district also employs a Public Information Specialist and a Technology Coordinator.

The district has been very attractive to growing families due to the increase in single-family housing in the medium-price range ($150,000-$300,000). The community has a predominance of white, middle-class family households. Hispanics comprise the largest minority in the district at 3.85%. Many households in the community are younger families with one or two wage earners, and at least one child living at home. The median family income is $56,042 (Demographic Analysis).

The district has a large group of parent volunteers that serve on citizen groups such as Friends of the District, Parent/Teacher Association, Art Awareness, as well as general volunteers in all the schools to assist teachers. The district is becoming more aware of lagging test scores and is piloting many interventions to improve academic scores.
National Context of the Problem

The problem of how to relate vocabulary and comprehension to real life situations cause educators concern, especially educators of disabled students. Students' lack of prior knowledge and information about the world in general poses problems in language and vocabulary development (Leverett & Diefendorfo, 1992). When there is a deficit in the child's vocabulary development, it effects comprehension and functional life skills on a daily basis. As these children approach adulthood, the deficit becomes more pronounced and can determine the quality of their adult life.

The ability to read is central to living a fulfilling life. If a child does not read fluently, broadly, and reflectively across all content areas, the chances for academic success, financial success, the ability to find interesting work, personal autonomy, or self-esteem are almost non-existent. (McPike, 1995, p. 25)

Traditionally, teaching vocabulary is a component of reading that teachers assume children will absorb with minimal direct instruction. This is not true of all children. Dollaghan and Kaston (as cited in Berg, Cressman, and Pfanz, 1999) found that children with vocabulary and comprehension problems are often unaware of the difference between understanding and failing to understand. Even when they are aware, they rarely ask for help. Since the children infrequently ask for assistance, the teacher is not cognizant of their lack of understanding and that continues to manifest itself into continual failure. It is imperative that teachers utilize meaningful vocabulary and comprehension activities where students can learn skills that will make them as independent and productive as possible in the community after
their formal education is completed. The National Longitudinal Transition Study (NLTS) also found disappointing results as only 57% of individuals with disabilities were employed three to five years after graduation from high school (Blackorby & Wagner, 1996).

Many disabled students are poor readers because they have deficiencies in correlating vocabulary and comprehension. Therefore, the ultimate goal of reading is to be able to decode and comprehend words in the environment which leads to an independent life. There are numerous factors that can be considered as causes for reading deficiencies.
CHAPTER 2

PROBLEM DOCUMENTATION

Problem Evidence

The evidence to document poor word recognition resulting in poor comprehension for Special Education students was gathered by developing, distributing and assessing teacher, parent and student surveys. Other data assessed included pretests given to the students on recognition of Dolch Sight Words and environmental Survival Signs. Comprehension Quickies, Wiggles and Squiggles, and My Second Stories Level I were used to check comprehension. The data was compiled individually for the students which gave a baseline for where to begin instruction.

Student Survey

Prior to administering the survey (Appendix A) the researchers visually presented the Garfield characters that were utilized in the survey. It was explained to the students that the happy Garfield figure represented a yes response and a sad Garfield figure represented a no response. The students were told to respond depending on how they really felt. The students were also told that there would be no consequences attached to their answers. Surveys were passed out to 18 students. The researchers read the questions and the students circled their answers. Constant supervision was given by the teachers as well as the
assistants to ensure that all students were on the same question. Results from the Student Survey provide evidence for a lack of word recognition and comprehension.

Table 7 shows that when asked about comprehending what they read, over a third of all the students felt they didn’t understand what they read. The table also shows that a majority of the students don’t like to read aloud. Students don’t like to read aloud because they don’t recognize the words and don’t comprehend what they’re reading. Therefore, they don’t read and their reading ability doesn’t improve. It becomes a cycle they’re unable to break. The same day the students were surveyed a survey was sent home to the parents.

Table 7

Student Survey Results

<table>
<thead>
<tr>
<th></th>
<th>Site A</th>
<th>Site B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can you answer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>questions about</td>
<td>61%</td>
<td>39%</td>
</tr>
<tr>
<td>what you’ve read?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you like to read</td>
<td>33%</td>
<td>67%</td>
</tr>
<tr>
<td>out loud in class?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Parent Survey

The researchers sent 18 surveys home with the children. A cover letter was sent with the survey (Appendix B) explaining that the survey was a component of the research project their child was participating in. Parents were asked to complete the survey and return it as soon as possible. Results from the Parent Survey also provide evidence for the problem of word recognition and comprehension. Table 8 shows that over a third of parents feel
their children don’t understand what they read. Almost half of the parents feel their children don’t read signs in store settings. Although some parents recognize a problem, the results of the pretests show a larger number of students exhibiting reading deficiencies.

Table 8

Parent Survey Results

<table>
<thead>
<tr>
<th></th>
<th>Site A</th>
<th>Site B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does your child understand what they’ve read?</td>
<td>Yes 75% 25%</td>
<td>Yes 80% 20%</td>
</tr>
<tr>
<td>In a store setting, does your child read signs or identify products on the shelves?</td>
<td>Yes 75% 25%</td>
<td>Yes 90% 10%</td>
</tr>
</tbody>
</table>

Dolch Sight Word Pretest

The first week in September 1999, pretests for the Dolch Sight Words (Ekwall & Shankar, 1988) were given to the students at both sites to determine the quantity and level of words recognized. All the students were pretested individually by the teacher. The students were shown teacher-made flashcards of the Dolch Sight Words. As the students read the words on the flashcards, the teacher notated those correct and incorrect on a master sheet. The length of time it took to administer the pretest varied depending upon the ability of the student. There were two second graders, five third graders, one sixth grader, one seventh grader, and two eighth graders who were administered the pretest. Figure 1 shows that students at Site A, an Elementary setting recognized 35% of the Dolch Sight Words presented on the
pretest. This reveals that the second and third graders are unable to recognize 50% of basic primary vocabulary found in elementary literature. Students at Site B, a Middle School setting, recognized 59% of the Dolch Sight Words presented on the pretest. This reveals that the sixth, seventh, and eighth graders are able to recognize just over 50% of basic primary vocabulary found in elementary literature. Typically, regular education students entering third grade have mastered the Dolch Sight Word list, so this data does support that a problem exists. Students not only master words in the school setting, but are cognizant of print in the environment.

![Dolch Sight Word Pretest](image)

**Figure 1.** Site A and B average percent scores of words recognized on the Dolch Sight Word Pretest

**Indoor/Outdoor Survival Signs Pretest**

The students at Site A were pretested on their recognition and comprehension of indoor and outdoor Survival Signs. The students worked individually with the teacher. They were shown 40 indoor and 40 outdoor picture cards. The students were asked if
they could read/tell what the pictures meant. The teacher notated correct and incorrect answers on a master list. Since the students at Site B had already been taught the Indoor Survival Signs during the 1998-99 school year, they were only pretested on the Outdoor Signs. Figure 2 shows the percentage of recognized and comprehended Indoor Survival Signs for the students at Site A only, while Figure 3 shows the percentage correctly recognized and comprehended for the Outdoor Signs pretested with students at both sites. Comprehension in this instance is defined as either being able to read the sign and give an accurate example, or recognize the visual picture and give an accurate example. Figure 2 clearly shows that the majority of students at Site A identified less than 30% of the signs presented.

![Indoor Survival Signs Pretest](image)

**Figure 2.** Students at Site A and percentages correct on the Indoor Survival Signs Pretest.

Figure 3 shows that students at both sites recognize less than 50% of outdoor environmental information. The pretest
revealed that students at Site A averaged 15% sign recognition, while students at Site B averaged 48% sign recognition. When looking at the average scores at Site A and Site B, it is apparent that students who exhibit deficiencies in sight word vocabulary also exhibit inadequate functional life skill vocabulary. It is also obvious that even when special needs students are in the community, where motivation is high, they still don’t make the connection to the printed word.

![Outdoor Survival Signs Pretest](image)

**Figure 3.** Class percentages at Sites A and B on the Outdoor Survival Signs Pretest.

Results of the surveys and pretests revealed low ability in reading and comprehension. Many factors are responsible for the lack of interest in reading and the ability to be successful.

**Probable Causes**

Students in self-contained classrooms have difficulty acquiring sight/functional word recognition and comprehension for various reasons. Reasons include the school structure,
developmental factors, teacher factors and parental factors.

School Structure

Students in self-contained classes are grouped together by age/grade. In the Elementary building, they have 2nd and 3rd graders who range from seven to ten years of age. In the Middle School, they have 6th, 7th, and 8th graders ranging from 11 to 15 years of age. “Multi-age grouping causes many teachers to be more concerned with classroom management and keeping students on task, rather than with the quality of students’ educational experiences” (Koretz, Barron, Mitchell, & Stecher 1996, p. 25). This spread in age/grade makes following the curriculum for each grade level and the day to day schedule each child follows for his grade level very time consuming and difficult for the teacher to plan lessons around. Lessons can be easily interrupted when children come and go to their special classes and therapists. Presentation of similar lessons may be done several times throughout the day due to the student’s varying schedules.

Locating interesting, age/level appropriate materials is complicated and the responsibility of the teacher. The availability of low-level high interest reading materials from publishers is minimal. “Older students with reading problems often are frustrated because books geared to their interest level are beyond their reading ability” (Mercer & Mercer, 1993, p. 468). In addition, the unavailability and cost of new materials causes overlapping from year to year because many of the teachers use relatively similar and cost effective materials in their classes. Teachers in self-contained classes require a wide range of materials because of the many differing levels, which again shows how overlapping can take place.
Students with a wide variety of disabilities are placed in a class together at Site A and Site B. These disabilities could include severe learning disabilities, mental retardation, behavior disorders, other health impairments, emotional disorders, traumatic brain injury, and autism. The ability to create solid teaching practices and lessons is extremely challenging when having to consider all the various disabilities and their academic needs in one class.

Illinois State Law allows self-contained classes to have up to 15 students with an assistant. Since this number is smaller than a regular class, self-contained classes are placed into smaller rooms. When considering the possible number of students in the room, the numerous disabilities, and the amount of furniture required in the class, the task of actually teaching for retention at Site A and Site B becomes arduous. There is virtually no room for learning stations, rugs, or chairs for reading and relaxation, and for small group work that doesn’t interfere with the other students.

Each of the five buildings in the district have grade clusters. Since busses are shared among all the buildings, they each have their own starting and ending times. Site A and Site B also has its’ own agenda for staff meetings. Therefore, the opportunity for self-contained teachers to meet and share methods and materials that have been proven to work is greatly diminished. This situation lends itself to the overlapping of materials. Since the students progress is very slow and they read on a primary level, there is a limited amount of high-interest materials for older students at this reading level. Consequently, students at Site B are still using many of the materials they used
when they were at Site A. The school structure magnifies the problem by the district having grade centered buildings, which make it difficult to meet with previous teachers. There is also a lack of publishers developing low level materials for special education students. Due to the amount of repetition, because of the lack of progress, students could be using the same type of materials, if there are even materials available, for the curriculum being taught, thereby contributing to students lack of word recognition and comprehension.

**Developmental Factors**

Each student in the district must meet specific requirements to be labeled with a disability that warrants placement in a self-contained class. This information can be determined through a complete case study evaluation completed by the school psychologist. Case study evaluations include testing of academic areas. These results show a discrepancy between the student's potential and actual performance levels in reading comprehension and word recognition. It is the severity of their disability that will determine the ability to learn, how much they will actually learn, and the rate at which they will learn (Berk, 1993). Early studies by Kirk revealed that intellectually challenged students read below their mental age and rarely ever catch up (Jenkinson, 1989). At Site B, it is quite common for a Middle School student with a disability to be four years below grade level. As the student gets older, the academic deficit seems to get larger. The student's disability prevents them from learning at a rate commensurate with their peers, therefore they have deficient sight and functional word vocabularies. By the time they get to Middle School, many students have had numerous teachers with different
teaching styles, yet they have been unable to bridge the academic gaps.

Teacher Factors

Self-contained classes at Site A and Site B are set up to appear very similar to a regular class, except on a smaller scale. The teachers try to make the special education students feel like regular education students and a part of the regular program as much as possible. In doing so, teachers frequently utilize strategies/curriculum meant for regular education students. Hallahan, Kaufman, Hunt, and Marshall believe that (as cited in Ruediger, 1998) "students with disabilities have learning and performance characteristics that call for a nontraditional approach to teaching selected academic skills" (p. 2).

The self-contained classes are, for the most part, academic in nature. The teachers frequently utilize traditional teaching approaches instead of application approaches required for long-term retention for special education students. Brolin (as cited in Ruediger, 1998) said that "a functional life-skills approach is based on the belief that students should learn skills that will make them as independent and productive as possible in a variety of community environments" (p. 2).

Surveys were sent to all special education teachers at both Site A and B to determine the time teachers spend on vocabulary instruction and what is the most effective method of instruction (Appendix C). Twelve surveys were returned and showed that 50% of special education teachers don't engage in direct instruction of vocabulary. The survey revealed that repetition was the most important component of teaching the disabled student. Teaching vocabulary utilizing games was the most frequently used learning
device. Ruediger (1998, p. 10) points out that "teachers are urged to reexamine how they view success for their students to ensure that academic time is spent on meaningful learning experiences."

Teaching special education students on a daily basis can be very frustrating, given the amount of time and repetition required for learning. Sometimes teachers move on to new lessons before actual learning for understanding and application can take place. As Ekwall and Shanker (1988 p. 358) point out, "severely disabled readers require repetition and drill to a point often referred to as overlearning." Teachers can contribute to the problem by using materials and curriculum meant for regular education students. In order for a special education student's education to be totally effective, some of the learning and repetition needs to take place at home.

**Parental Factors**

Many parents of disabled students rely mostly on the teacher and the school for educating their children. What they don't realize is that most of daily living skills instruction that incorporates reading skills takes place within the home environment and through normal errands that families need to take care of. Briggs and Richardson (1998) believe that "children's future reading performance, more than likely, can be enhanced by parental use of environmental print for educational purposes" (p. 226).

Parents don't often realize the impact that they have on their child's school achievement.

"Parental support is often a key factor in maintaining a students' motivation and achievement. Positive parental
expectations can be helpful in the development of the student; however, parental expectations that are negative, too high or too low can be harmful to the students' academic and social developmental" (Mercer & Mercer, 1993 p. 83).

It's very easy for parents to give up the practice of shared reading since disabled readers do not find reading easy and pleasurable. They will usually exhibit inappropriate behaviors and many parents give in. What is important for parents to realize is that learning does not take place only at school. Learning can take place in any environment.

Table 9
Results of Parent Survey

<table>
<thead>
<tr>
<th></th>
<th>Site A</th>
<th></th>
<th>Site B</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Does your child choose</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>to read by himself or</td>
<td>37.5%</td>
<td>62.5%</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>herself?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does your child read to</td>
<td>50%</td>
<td>50%</td>
<td>80%</td>
<td>20%</td>
</tr>
<tr>
<td>someone at home?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A Parent Survey was sent home to determine reading trends at home, as well as the parents perception of how well their children can comprehend what they read. Sixteen surveys were sent out, and 16 were returned. Table 9 shows that at least half of parents at each site have children that choose not to read by themselves at home. It also goes on to reveal that 50% of parents at Site A and 20% of parents at Site B have children who don't read to anyone at home. Reading outside the school setting is crucial for special education students in order for them to maintain skills. This shows a high percentage of students missing out on those opportunities. The table also shows that a majority of parents at
both sites feel that their children can read signs or identify products at the store. It also shows that a majority of parents at both sites feel that their children do comprehend what they've read.

Table 10

Results of Student Survey

<table>
<thead>
<tr>
<th></th>
<th>Sites A and B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Do you like to read books at school during free time?</td>
<td>67%</td>
</tr>
<tr>
<td>Do you read at home?</td>
<td>67%</td>
</tr>
<tr>
<td>Do you like books as presents?</td>
<td>50%</td>
</tr>
<tr>
<td>Do you like to read during summer vacation?</td>
<td>67%</td>
</tr>
<tr>
<td>Do you like to go to bookstores?</td>
<td>89%</td>
</tr>
</tbody>
</table>

Eighteen students were surveyed at school to determine the student's reading habits and their feelings about reading. Table 10 shows only a third of the students at both Sites A and B don't like to read during their free time, at home, or during their summer vacations. Most of the students like to go to bookstores and half like to receive books as presents.

There is a discrepancy between the parents and the students, in that a greater percentage of parents say their children don't read to themselves at home. Overall, it appears that a majority of the students feel that they do get some type of reading experiences at home or during vacations. Learning does not only take place at school, but at home. All children benefit from life
and reading experiences especially children with disabilities, therefore a lack of these experiences result in poor reading skills.

Although there are many factors that cause students to be poor readers due to inadequate word recognition and comprehension, there are a variety of simple direct instructional methods and activities that teachers can incorporate into their reading instruction that will improve their students ability to read for understanding.

The school structure and developmental disabilities are factors that cannot be changed by the researchers. The researchers also have minimal control over teacher and parental factors. The most control is actually during instructional time with the students. The type of instruction, time allotted for instruction, and the materials utilized are factors that can be changed to best meet the student’s needs by the researchers.
CHAPTER 3
THE SOLUTION STRATEGY

Literature Review

Researchers have continued to prove that vocabulary acquisition and comprehension go hand in hand. Mastery in one or the other does not allow for independence and still renders the child illiterate. In *Learning to Read*, Gough and Juel (1991) stated the following:

Let us suppose that reading consists of two things. One is word recognition; the reader must grasp what word each letter string represents. The other is comprehension; the reader must then decide what those words collectively mean. Both things are necessary; neither is sufficient. If we let R represent reading, D word recognition, and C comprehension, then this idea can be stated as an equation; \( R = D \times C \). (p. 41)

Educators need to concentrate on both vocabulary and comprehension in order to accomplish \( R = D \times C \).

Students with disabilities are taught the same skills and curriculum as their nondisabled peers, so a lot of time is wasted on skills that don't prepare them for independent living. In the past few years the educational system has rethought its ideas concerning effective teaching of the disabled. Effort has been made recently to make reading instruction more relevant to the
real world than what exists only in school (Murphy, 1995). “Today, the developmental approach to curriculum for students with disabilities has been replaced by a functional life skills approach to curriculum” (Brolin, 1995 p. 25). A functional life reading program still involves the recognition of vocabulary and comprehension, but it involves specific vocabulary that is critical to the student’s independence.

When implementing a curriculum for the disabled student, the usefulness of the skill and the amount of independence it allows the student should be considered (Brolin, 1995). Educators need to survey their communities in order to correlate the available resources with the curriculum (Chadsey-Rusch, Rush & O’Reilly, 1991; Smith, Patton, & Ittenbach, 1994). There are many instructional strategies that can be used. The teacher needs to decide what is best for their students.

**Instructional Strategies**

“Direct instruction is a system of instruction that is backed by years of field studies and research on effective teachers and successful practices.” (DiChiara, 1998, p. 12). “It is one of the few methods of instruction that we determined worked consistently well with students with disabilities at all levels--elementary, junior high, and high school.” (DiChiara, 1998, p. 20). The teacher directs every task that the student is asked to do and the tasks are taught sequentially. It emphasizes guided practice, immediate reinforcement, and the amount of repetition required for mastery by disabled students.

Some researchers believe that when comparing the effectiveness of classroom instruction and community based instruction, in teaching sight vocabulary, there is no significant
difference statistically (Briggs & Richardson, 1993; Mosely, Flynt, & Morton, 1997). Classroom instruction refers to teaching functional life skills in the classroom, such as holding up a picture of detergent and saying, "This is detergent." Community based instruction involves physically taking the student to the store and locating detergent on the shelf. After locating a product, the student tells which department it was found in, the price, and what it is used for (Haggard, 1986; Klemp, 1994). "As a result of repeated exposure to these labels and signs, the print itself gradually becomes decontextualized and can be recognized from graphic cues alone" (Ehrl, 1991, p. 60-61). Our environment is comprised of thousands of words where children can find print in grocery stores, department stores, restaurants, and on signs (Briggs & Richardson, 1993; Vaca, Vaca, & Gove, 1991). By coordinating the two, students can focus on the necessary vocabulary words and skills to function in their community as independently as possible. It is imperative that educational activities be created so that students can transfer their skills to the natural environment (Snell, 1993).

The greater the correspondence between environmental learning and school activities, the more likely the transfer will take place. Children's contact with words in the environment builds a foundation for literacy because all meanings that are attached to the words that we use in language are obtained through experience. (Ross & Roe, 1990, p.65)

Direct instruction activities utilizing flashcards with sight words, informational and safety words, and signs in the community work well with these students. Pictures, photographs, and
cardboard replicas, the actual product, and advertisements are also motivating ways to teach meaningful sight vocabulary and comprehension (Wilcox & Bellamy, 1987). However, direct instruction does have its pros and cons. The positive benefits are that the teacher or assistant can hit the exact skills that the student needs and get immediate feedback on what the student is still lacking. They can also immediately praise the student and give positive reinforcement for new skills learned. Our experiences working with disabled students have shown that students come to expect adult help and become dependent upon it. As a result of this the student doesn’t learn to think independently and the adult help becomes a crutch. This becomes a difficult cycle to break. Many students carry the dependence into social situations and outside activities. One way to assist students in being independent is through cooperative learning where each student has a responsibility.

A review of early research on cooperative learning shows that it is very effective in improving basic skill acquisition (Bellanca & Fogarty, 1991). It can also improve social skills in the areas of following directions, peer interactions, and staying on task (Bowman, Carpenter, & Paone, 1998). Cooperative learning using mixed ability groups can be a plus for the slower students. They have more of a chance to participate and can learn from the stronger students. It is also beneficial for the stronger students because they can develop more self esteem and become leaders in the group. Disadvantages of using cooperative learning in a small classroom are that one student can take over the group and there is no creative way to form the groups. Due to the small class size and the various disabilities, it is virtually
impossible to group the students in a manner in which they can all learn from the experience. Vocabulary lessons can be boring for some students, so there is little or no comprehension. "One way to enliven these lessons is to combine them with two effective teaching strategies-cooperative learning and story development by students" (Wilkinson, 1994, p. 221). By having groups of mixed-ability students use vocabulary words to write or dictate a story or sentence to the teacher, it can help students remember the pronunciation of the word and the meaning of it. It can also give the teacher more direct instruction time with the children by being in a group with them and by placing the teacher assistant in another group. The class size and the state regulations dictate the need for a teacher assistant. The school district must employ an assistant if the class has twelve or more students.

Thematic units and teaching environmental words in categories provide active involvement, motivation, and relevance that lend to comprehension and word learning. Open discussion is an important step in introducing new words (Barron & Melnik, 1973) and should be utilized. Open discussions should be based on the student's life experiences and each student should be encouraged to participate. Other activities, such as hands-on activities and role playing promote student involvement. Activities, such as hands-on games and role playing that coincide with the thematic units can further enliven vocabulary acquisition and reinforce comprehension (Carr & Wixson, 1986; Nagy, 1988; Rudell, 1986). The teacher needs to decide which meaningful activities are appropriate for their students.

Meaningful Activities

There are many ways in which teachers can increase their
student’s knowledge while they are having fun and are motivated at the same time. They are as follows: word wall/thematic word wall, functional words, home reading log, survival signs, comprehension programs, games, and community based field trips. Except for the home reading log and cooperative groups, they all involve direct instruction.

**Word wall/thematic word wall.** Many students have difficulty with comprehension when expending their energy on word recognition. With children recognizing high frequency words automatically, they can now focus more attention on comprehension (Cunningham, 1997). Repetition is the key to quick identification of the word (Nagy, 1988). The word wall can consist of Dolch sight words while the thematic word wall can deal more with community based words (Robb, 1997). They both reinforce alphabetizing skills (Towell, 1998). Each letter of the alphabet is displayed on the bulletin board in alphabetical order with space left under each letter to add words as the year progresses. The words are outlined in the shape of the letters. This helps the students to notice the visual configuration of each word which is beneficial to them when writing the word. Each week new words are chosen and added to the word wall. The thematic word wall is comprised of words with a theme or category, such as months of the year, days of the week, seasons of the year, and words that correlate with thematic units being taught in the classroom (Robb, 1997). The word wall is an easy and time efficient way for students to refer to commonly used words during daily writing activities and is a good way for teacher’s to quickly assess the acquisition of sight vocabulary. The main drawbacks to word walls are that they take up a lot of wall space and the many words
displayed may be overstimulating to some children. Lower functioning students may not benefit from the word wall, so there are other commercial products they may benefit from.

Functional words. The Edmark Reading Program is a popular and effective program that is used by many educators of non-reading students. It is very structured and repetitive, and teaches the sight words as well as the comprehension of those words. The program teaches 100 vocabulary words in each of the following four categories: signs, fast food, grocery words, and work words. Each lesson is divided into word recognition, post-tests, and worksheets. The student works with the teacher one on one in short two to five minute sessions. After ten words are taught, the student is given a post-test on those words and the previously taught words to reinforce them and check on retention. The worksheets are used to teach and check on comprehension. This program can be successful for many students, because the method of instruction is always the same and multiple repetitions are used throughout the program (Austin & Boeckman, 1990). Experience shows that for some students and the teacher this can be boring and unmotivating. Not all reading instruction is done at school, home instruction should be an integral part of the child’s learning.

Home reading log. The district of the targeted sites requires home reading as a component to their language arts curriculum. A parent’s first responsibility is to read daily with their child (Evans, 1999). The requirement for the self contained students is less than the requirement for the regular education students due to the fact that reading can be difficult and tedious for them. A folder is sent home with the students on Mondays that contains a sheet to log their reading times with the dates. They
are required to read 15 minutes a night for five nights during the week. There is also a sheet to record the books they have read and the number of pages. The students return the folders the next Monday. If they fulfill all the reading requirements, they have read 75 minutes a week. They can read to themselves, to someone else, or have someone read to them. "Reading aloud to children is a proven way to develop vocabulary growth." (Patton & Holmes, 1998, p. 20). Newspapers, magazines, and books are all acceptable forms of reading material as long as they contain appropriate content. Unfortunately, one of the drawbacks is that some homes do not have appropriate printed materials for their children to read (Edwards, 1995, Baker, Scher, & Mackler, 1997) and many parents do not see the important correlation between reading at home and reading achievement (Tracey, 1995). In preparation for community-based instruction, specific vocabulary needs to be introduced to the students.

**Survival signs.** Indoor and Outdoor Survival Sign Sets cover 80 common signs found inside and outside of buildings (PCI Educational Publishing, 1997). The signs are geared toward students who have limited reading ability and represent the most commonly used signs. The signs are arranged in alphabetical order for easy use and come with a pretest, post test, and worksheets. The signs are colorful and catch the students' eye. Many students want to find the signs in the environment. Public institutions do not always post the universal signs, so it can be confusing to the student. Recognition of words and phrases does not lead to complete reading comprehension.

**Specific Skill Series- Using the Context.** (Boning, 1990). Specific Skill Series is designed to develop comprehension. It
provides practice material on ten different levels. The levels are as follows: Picture level, Preparatory level, A, B, C, D, E, F, G, and H. The student is given a pretest to see which book is appropriate for beginning the series. The passages are brief and appeal to older as well as younger students. The students read the passages or in the case of nonreaders, the teacher reads it to the student, and the student answers the questions on a corresponding answer sheet. Once the student finishes their level with 80% accuracy, they move to the next level. A plus of the program is that it is sequential, but it is very difficult to attain the 80% accuracy and has to be done individually. Another way to motivate students to learn is by using games.

Games. There are many teacher created and publisher created games that are motivating and effective for teaching vocabulary and comprehension while encouraging appropriate social skills. The PCI Publishing Indoor and Outdoor Bingo Games (PCI Publishing, 1997) are good ways to teach the survival signs and are very simple to play, but fun for the students, too. Basic Sight Words Bingo is another fun and simple game for beginners and experienced readers to have an equal chance in recognizing words (Trend Enterprises, 1995). The main disadvantage to playing games is that the students would prefer to play games rather than participate in direct instruction. The use of alternative settings helps to motivate students.

Community based field trips. Students benefit from going on trips to local establishments. They can apply life skills learned in the classroom as well as practice appropriate social skills. Educators should provide direct services in the school, home, and
community environment where these skills will be used (Oregon State Department of Education, 1990). Even a walk around the surrounding neighborhood is educational. The Middle School self contained students take field trips to places, such as Target, Dominick's, Jewel, and Walmart twice a month. Before embarking on the trip, the students practice vocabulary words they will be using on that particular trip. Once at their destination, the students work in cooperative groups to find the prices of certain products, or to ask employees certain questions, such as where the restrooms are located or the store's return policy. When the students return to school they have to calculate the total cost of the items they found in the store, write in their field trip journals, and a class discussion follows. Community learning can also have disadvantages. It requires extensive planning by the teacher, which includes visiting the site and making arrangements with personnel. Transportation is not always readily available. There can also be a lack of responsibility on the students' part in not preparing for the trip. Community resources are not always found within a short distance (Wilcox & Bellamy, 1987). When resources are not available, there are activities teachers can utilize in the classroom.

**Teacher read aloud.** According to Anderson, Hiebert, Scott, & Wilkinson in the Commission on Reading in 1985, "The single most important activity for building the knowledge required for eventual success in reading is reading aloud to children" (p. 32). It is important to read aloud to primary students and then continue throughout the child's school career (Hemerick, 1999). When the teacher reads aloud to the student it shows the student a love of reading and motivates the student to read, but this is in
addition to the regular reading program.

**Wiggles and Squiggles Reading Comprehension.** This reading comprehension book (Schaffer, 1979) is for primary students who are low level readers. Each page has a four sentence paragraph about an animal that uses basic sight vocabulary and four comprehension questions. The student reads the paragraph and answers the question with a written answer. The student is not expected to write a complete sentence. On the bottom of each page there is a box for a follow up art activity. There are pictures on the side of the page that show the student how to create simple drawings of the animals written about in the paragraphs. When the students are finished with the reading and comprehension activities, they can draw a picture about what they have read. This is an effective motivator for young and low level readers. Older children may find this book too immature looking. When a student has finished this book, they are ready to move on to comprehension activities that incorporate more difficult sight words and are longer in length.

**My Second Stories.** *My Second Stories* (Schaffer, 1979) is utilized by students who have begun to develop a limited sight word vocabulary. The stories are five or six sentences long and get progressively more difficult. The stories are typed in large print with double spacing between the sentences, which makes it easier for the beginning reader to read. There are six comprehension questions after each story, and the student is expected to answer the questions in complete sentences. A picture is on the top of each page that coordinates with the story. When the students are finished answering the questions, they can color the picture. This book gives the low level reader a chance to
answer simple questions in complete sentences. An older, low level reader may find the book too immature in its content and appearance.

I Love Reading. I Love Reading (Gerig, Robinson-Cobb, Shull, 1999) is a book of short paragraphs composed of basic sight vocabulary which get progressively more difficult. The paragraphs are written on a first grade level and appeal to a low level reader. The paragraphs are about everyday occurrences the student can relate to, such as, visiting the zoo, playing in the leaves, and sleeping in a bed. The print is large with double spaces between the lines, so it is easier for a student with reading difficulties to read. The comprehension activities vary, so they don’t become tedious and can assess a low level reader using different methods. Some of the methods are fill in the blank, circling a given item, and short answer sentences. There is an eye catching picture that can be colored when the student completes the activity. I Love Reading is interesting and fun for younger children who are low level readers. The problem with this material is it is too immature looking for the older student who is a low level reader. There are other comprehension materials on the market that are for the low level reader which are more appropriate for the older student.

Comprehension Quickies. These are short paragraphs and simple questions that are answered in written form in complete sentences. A small, cartoon-like picture is located in the top corner of each paragraph. There are four levels of Comprehension Quickies (Miller, 1999) that encompass reading levels from second grade to fifth grade. The students read the paragraphs which
consists of three to four sentences and answer five to seven questions about the paragraph in complete sentences. Each level gets progressively harder. Since the paragraphs are short, but contain a lot of information, they are easy and interesting for students with reading difficulties to read and comprehend. Comprehension Quickies can only be used with students who read on a second grade level or above. It is not a program for students who are not motivated to work independently.

Not all of the above activities were selected by the researchers because of time constraints, money, teacher preparation time, and the effectiveness of the curriculum. The activities chosen by the researchers for the intervention are Comprehension Quickies, Wiggles and Squiggles, My Second Stories, I Love Reading, Survival Signs, teacher read aloud, and Dolch Sight Words. They are very simple to implement and the level can be differentiated easily to meet the student’s needs. The interventions were time efficient and were activities that focus on what the student needs in life.

Project Objectives and Processes

As a result of teaching sight and functional vocabulary through direct teacher instruction during September, 1999 through December, 1999, the elementary and middle school targeted self contained cross categorical students will increase vocabulary acquisition and comprehension. This will be measured by teacher checklists, tests, and teacher, parent, and student surveys. In order to accomplish the targeted objective, the following processes are necessary:

1. Development and implementation of tools and procedures that promote vocabulary acquisition and comprehension.
2. Create activities and games that will help promote vocabulary acquisition and comprehension.

3. Initiate direct teacher instruction to teach vocabulary and comprehension.

Project Action Plan

This action plan will be implemented on a daily basis for approximately 40 minutes a day at the beginning of the interventions. As more Dolch words are added to the word wall the interventions will last approximately 60 minutes a day. This allows the repetition that is necessary for the students. The time frame for the interventions begins on September 13, 1999.

1. Administer student, teacher, and parent surveys, and pretest students to provide baseline data. Pretests consist of Dolch sight words, and Survival signs. In the case of comprehension, the students were placed in levels based on the level of completion from the previous year. This will be done with the students on an individual basis. They will be shown word flashcards and signs which the students will have to identify.

2. Introduce the word wall. Five new words will be added to the word wall every week. The first day of the week, the words will be introduced. The second and third days of the week, clues will be given about the words, so the students can try to guess the words, and on the fourth day of the week, the students will have to put the words into sentences orally. The fifth day of the week is a post test on all the words. This will take between five and ten minutes every day.

3. The read aloud will be done by the teacher for 25 minutes
daily. The teacher will choose a book or books that might go with a thematic unit or any book at random the students will enjoy. During the read aloud the teacher will ask questions that are both literal and inferential.

4. The indoor and outdoor survival signs will be taught using five new signs a week. The signs will be shown and discussed as to where a student might see them and what they mean. This will take ten minutes a day. On Friday’s the students will be given the corresponding worksheets to complete and to be used as a post test. The time allotted for this activity is ten minutes. At the end of the unit a post test will be given where the signs are shown individually to the student and the student has to read them and tell the meaning. If the student can explain the meaning of at least 80% of the signs, they receive a certificate.

5. The home reading logs are collected and returned to the students every Monday or Tuesday, if there is no school on Monday. The teacher documents the amount the student has read at this time. The student and parent are responsible for completing the log after the student reads or has been read to. Everytime the students return the log and has completed the required reading, they receive a sticker.

6. Cooperative games will be played three times a week. The games are survival signs bingo, hangman, and sight word bingo. The students take turns calling the signs or words. In the case of nonreaders, a reading student will be paired with the nonreader, so they can have
assistance. The signs will be called out and then held up by another group member, so the students can also visually see them and more students in the group can actively participate. When a group member has a bingo, another student can check his card. This gives all members of the group jobs. This will take 15 minutes.

7. **Comprehension Quickies, Wiggles and Squiggles, My Second Stories, and I Love Reading** will be done once a week. The students will do it independently.

**Methods of Assessment**

In order to assess the effects of these interventions, teacher checklists will be updated on a monthly basis. Both pre and post test data will be assessed before and after implementation. Monthly assignment data will be collected and analyzed on a continuous basis.
CHAPTER 4
PROJECT RESULTS

Historical Description of Intervention

The objective of this intervention was to improve sight and functional vocabulary and comprehension. The implementation of vocabulary games, the use of a word wall, indoor and outdoor survival signs instruction and games, and comprehension-related activities were selected to improve vocabulary recognition and reading comprehension.

In addition to these specific activities, a home reading log sheet was sent home weekly for 12 weeks and the students were expected to return it on Monday’s. They were given a new sheet to record their home reading. At that time, they put their name and date due on the new log, so there was no confusion as to when the log needed to be returned.

The researchers read aloud daily for 25 minutes. Literal, inferential, and prediction questions were asked before, during, and after the read aloud selection.

On Mondays, the researchers displayed five sight words on the board in full view of all the students. The students were asked to identify the words they recognized. Any unrecognized words were identified by the researchers. Words already placed on the word wall were reviewed. At Site A, five indoor survival signs
were displayed, and at Site B, five outdoor survival signs were displayed in full view of all the students. The students were asked to identify any signs they recognized. They were also asked to explain the meaning of the sign. Any unrecognized signs were identified and explained by the researchers. Previously introduced signs were reviewed. Survival sign bingo was played. Any returned home reading logs were collected.

On Tuesdays and Wednesdays, the researchers gave clues about the visual configuration of the words presented that week. All word wall words were reviewed. The students were asked to identify and explain indoor and outdoor survival signs. All previously learned signs were reviewed. In addition, on Wednesdays, Hangman was played.

On Thursdays, the students were asked to use the words for the week in sentences orally, and word wall words were reviewed. All the survival signs were reviewed.

On Fridays, a weekly post test was given of the word wall words. Then sight word bingo was played. The survival signs were reviewed. The students were given a comprehension sheet to read and complete.

There were four non-reading students at Site A who were unable to complete the comprehension worksheets. There was one student at Site B who refused to complete the comprehension sheets. Instead of answering the questions, he copied the questions. He refused to work independently because an adult was not sitting with him. There were two students at Site A who were switched from Wiggles and Squiggles comprehension sheets to My Second Stories because they needed more of a challenge. At Site A there were two students who started in Comprehension Quickies and
switched to *I Love Reading* comprehension sheets because the sheets were too much of a challenge. The data collected from the interventions will be discussed in the results.

**Results**

Data was collected and analyzed from four sources. They were post-tests of the indoor and outdoor survival signs, post-tests of the Dolch sight words, Home reading logs, and comprehension tests.

**Indoor and Outdoor Survival Signs**

In order to assess the effects of the intervention, a post-test was given upon completion of the Indoor and Outdoor Survival Signs. It was compared to the results of the initial pre-test. The numbers reflect the average percentage of correct answers students received on the pre-test and post-test. The results in Table 11 are for the indoor and outdoor survival signs intervention that was a component of the action plan at Site A and Site B.

**Table 11**

<table>
<thead>
<tr>
<th>Sites</th>
<th>Pre-test</th>
<th>Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site A</td>
<td>26%</td>
<td>93%</td>
</tr>
<tr>
<td>Site B</td>
<td>47%</td>
<td>69%</td>
</tr>
</tbody>
</table>

Both sites showed improvement in recognition of survival signs. Site A revealed an improvement of 67% on the Indoor Survival Signs while Site B showed an improvement of 22% on the Outdoor Survival Signs. Before informal instruction began, students at Site B had been exposed to the signs during community based field trips the previous school year, which made the pre-test higher than expected. There were several signs that are
rarely seen in the community. A majority of words found in most of children’s literature are sight words of which many cannot be decoded, but are recognized by sight.

Dolch Sight Words

Table 12 shows the results of data gathered utilizing a pre-test and post-test to show increased recognition of Dolch Sight Words. These words are the words that were placed on the word wall.

Table 12
Comparison of Dolch Sight Words Pre/Post Tests

<table>
<thead>
<tr>
<th>Sites</th>
<th>Pre-test</th>
<th>Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site A</td>
<td>35%</td>
<td>85.6%</td>
</tr>
<tr>
<td>Site B</td>
<td>59%</td>
<td>82%</td>
</tr>
</tbody>
</table>

Site A post-test average does not include three non-reading students. This portion of the intervention was ineffective for this group. They made no measurable progress. The post-test results based on the other students showed a marked increase. The increase was approximately 50%. Site B showed an increase of 23%. One student increased his word recognition by only five words.

Home Reading Log

Table 13 shows the average percentage of returned Home Reading Logs gathered during the intervention. Both sites showed a substantially less than 50% return rate. Site A return rate varied between 0% to 67% and Site B return rate varied between 0% to 50%. After reviewing the parent’s responses on the survey
about home reading, the researchers expected higher percentages in
the number of logs returned. It is imperative that students be
able to comprehend, as well as recognize words.

Table 13

Home Reading Log Results

<table>
<thead>
<tr>
<th>Sites</th>
<th>Number of Weeks</th>
<th>Average Returned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site A</td>
<td>12</td>
<td>34.5%</td>
</tr>
<tr>
<td>Site B</td>
<td>12</td>
<td>26.8%</td>
</tr>
</tbody>
</table>

Comprehension

There were many variables present in the comprehension
portion of the intervention. At Site A four students changed the
level of comprehension activities they were working on. Two of
the students could decode the passages, but were unable to
comprehend them. They moved to a level commensurate with their
ability to comprehend. Their final average was 65% accuracy. Two
other students were moved to a higher level because the level they
were originally placed in was not challenging enough. Their final
average was 90%. One student remained in the lowest level and the
average was 66%. Behavioral issues were always present when
completing comprehension activities. After the intervention was
concluded and the data was analyzed, several conclusions and
recommendations could be made, to further help other professionals
that may want to work on vocabulary and comprehension development.

Conclusion and Recommendations

The researchers chose this topic for an intervention because
a majority of students in special education self contained
classrooms have limited reading abilities. There are a small
number of students who can decode words near their grade levels
but can’t comprehend. They are basically good word callers. On
the other end of the spectrum, there are students who have
virtually no concept of the printed word, even after being in
school for several years. They are considered non-readers. Most
of the students fall into the third category; they have very
limited sight and functional reading vocabulary. They read
several years below grade level.

Overall, the teachers felt that there were portions of the
program that were a success. All the students improved their
abilities to identify the survival signs. Site B had two students
that showed minimal improvements because the outdoor survival
signs seemed more difficult to learn. The researchers feel this
is because the signs are visually appealing with minimal print.
The signs can be seen in the community and have very concrete
meanings to the students. The survival sign bingo games were very
motivating and reinforced the signs in a fun and simple way. The
students enjoyed playing the games and looked forward to them each
week.

The word wall intervention proved to be minimally successful.
The non-readers were not helped by this intervention. The
students with limited sight word recognition were able to
recognize a few more words by the end of the intervention. We
feel this to be true for several reasons: too many words were
introduced each week, the words were very abstract, there were no
pictures that visually represented the words, and behaviorally
some of the students weren’t motivated. This was especially true
for the non-readers. They couldn’t see any significance in paying
attention and couldn’t relate it to themselves. The non-readers
did not realize they were not reading. Since Sight Word Bingo and
Hangman were games they found fun, as a result, they would focus their attention enough to play. However, they couldn’t read the words on their own and required assistance from other students, the teacher, or the teacher assistant. A suggested modification would be to introduce only three words per week and to combine the words with a picture. The students could make a word wall notebook to practice at home. The students who are capable could write a sentence in the notebook. Another suggestion would be to play the vocabulary games more frequently.

We felt there was minimal improvement in the comprehension activities. The researcher at Site A felt that the scores were not always accurate due to these behavioral issues. There were two levels of comprehension activities at Site B. Three out of six students in level I increased their reading comprehension by 15%, while one student stayed the same, and two student’s reading comprehension decreased. The student’s that showed a decrease in reading comprehension were distracted and had trouble staying on task. Group II at Site B showed one student increased his reading comprehension by 23%, while the other two student’s reading comprehension decreased. One student’s comprehension stayed at 0%. The researcher at Site B felt that Group II’s scores were due to the student’s behavior and inability to work independently. By the end of the intervention a majority of the students were able to complete the worksheets in less time, they asked less questions, and the answers appeared to be more coherent. The scores did not reflect consistent improvement. None of the students were ready to go on to the next level after the intervention. The ability to comprehend didn’t carry over into any other reading activity. A suggestion to improve this
intervention would be to provide more functional comprehension activities which would make it more meaningful and relate to everyday life. These activities should include community based field trips to various shopping and eating establishments in the local community. The students should be required to use advertisements, menus, directories, and schedules they need to master in order to become independent in daily living. Comprehension games could be used as another method of instruction.

The Home Reading Log proved to be an ineffective component of the intervention. After reviewing the parent's responses on the survey about home reading, we expected higher percentages in the number of logs returned. Since this was an out of school activity, it was out of our control. Even though it was discussed frequently with the students, they are not independent and responsible enough to follow through with the assignment. It is of great importance to have the support and involvement of parents at home. This is true of disabled students because they need the practice at school and at home in order to make the most progress they can. Since the students do not read outside of class, students need to be given time each day to read in class. However, the Home Reading Log is a district requirement and should be sent home and hopefully the parent will encourage the child to read.

At Site A, the read aloud was effective. It was enjoyable, the students paid attention, it could be applied to themes, and the non-readers could participate in answering questions. The researcher at Site B had more difficulty implementing the read aloud due to behavior and lack of interest. The researcher at
Site B has since found reading aloud to be more effective when a written quiz is given after a section of the book is read. It gives them a reason to listen. The researcher has also chosen more mature literature that peaks the student's interest.

Our beliefs as special education teachers have not changed because of this intervention. We feel direct instruction is the most effective method of teaching our population of students. Games are an integral part of this direct instruction.

The goal of this research project was to improve the acquisition of sight and functional vocabulary and comprehension of self contained special education students in grades two, three, six, seven, and eight. Sight and functional word recognition, a home reading log, and comprehension worksheets were implemented in order to achieve these goals. Overall, the results of this intervention were not as positive as the researchers had expected of the targeted groups for several reasons: the students disabilities combined with their low mental capabilities, the lack of parental support, and the intervention time was not long enough for disabled students to make noticeable progress that they could retain. This intervention has shown that the use of a variety of research based instructional strategies combined with consistent practice can make positive gains in recognition of functional vocabulary. However, this intervention has also shown that in the areas of sight word vocabulary and comprehension the impact was less positive. We feel more time should be spent on each word and less words introduced at a time. More visual aides should be combined with direct instruction.

This study shows that disabled students need a reason for learning vocabulary and comprehension. It is imperative that time
is not wasted on meaningless curriculum, but instead on real life activities the student will use in daily living.
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San Antonio, TX.


APPENDIX A

STUDENT SURVEY
Reading Survey

1. Do you like to read books in school during free time?

2. Do you read at home?

3. Do you like getting books as presents?

4. Do you read during summer vacation?
5. Do you like going to bookstores?

6. When the teacher asks you questions about what you read, can you answer the questions?

7. Do you like to do reading workbook pages and worksheets?

8. Do you like to read out loud in class?
9. Do you like the stories you read in reading class?

10. Do you read to anyone at home?

11. Do you read signs in the store?

12. Do you find things on the shelves in the store for your Mom or Dad?
APPENDIX B

PARENT SURVEY
Parent Survey

1. Do you have reading materials for your child available in your home?
   Yes ________  No ________

2. Please put a check by the reading materials found in your home.
   [ ] newspapers  [ ] magazines  [ ] books  [ ] other  [ ] none

3. Does your child choose to read by himself/herself?
   Yes ________  No ________

4. Does your child read to someone at home?
   Yes ________  No ________

5. How much time do you spend reading with your child per week?
   [ ] 0-5 minutes  [ ] 5-30 minutes
   [ ] 30-60 minutes  [ ] over 60 minutes

6. In a store setting, does your child read signs or identify products on the shelves?
   Yes ________  No ________

7. Do you feel your child understands what they've read?
   Yes ________  No ________
APPENDIX C

TEACHER SURVEY
Dear Teachers,

We are currently enrolled in a Master’s Program through St. Xavier University. We are working on an action research project involving vocabulary development. Please take a few minutes to complete the survey and return it to us as soon as possible. We appreciate your cooperation! Thank you.

Diane Henning - Middle School
Anita Pickett - Elementary

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++

1. Do you teach sight/functional vocabulary?

2. How often do you teach lessons for sight/functional vocabulary?

3. How many sight/functional vocabulary words do your students recognize?
   
   ____80-100%   ____60-79%   ____50% or less

4. How well do you think your students comprehend what they read?
   
   ____80-100%
   ____60-79%
   ____50% or less of what they read

5. What materials/programs do you use?

6. What do you feel are the most effective methods?
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Author(s): Henning, Diane; Pickett, Anita

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