DOCUMENT RESUME

ED 473 054   CS 511 798

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TITLE   Improving Reading Comprehension by Predicting, Monitoring
                Comprehension, Remediation, and Personal Response Strategies.
PUB DATE   2002-12-00
NOTE   85p.; M.A. Research Project, Saint Xavier University and
                SkyLight Professional Development.
PUB TYPE   Dissertations/Theses - Masters Theses (042) -- Reports -
                Research (143)
EDRS PRICE   EDRS Price MF01/PC04 Plus Postage.
DESCRIPTORS   Action Research; Elementary Education; Grade 1; Grade 3;
                Grade 5; Graphic Organizers; Instructional Improvement;
                Reading Attitudes; *Reading Comprehension; *Reading
                Improvement; *Reading Instruction; *Reading Strategies;
                Remedial Instruction; Teacher Improvement
IDENTIFIERS   Direct Instruction; Illinois (Chicago Suburbs)

ABSTRACT

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fifth grade classrooms in a diverse middle class community located in
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process, and direct instruction provided by the instructors. Post
intervention data indicated more student involvement and interest in reading.
The learners exhibited more organization skills, more internalization, and
personal responsibility in learning. Finally, more effective instruction was
provided by the teachers through the instruct, model, and coach and practice
method. Contains 27 references, and 10 table and 8 figures of data.
Appendixes contain two teacher observation checklists, a reading survey, a
visual aid, and blank Venn diagram, flow chart, and main idea/detail webs.
(Author/RS)

IMPROVING READING COMPREHENSION BY PREDICTING, MONITORING COMPREHENSION, REMEDIATION, AND PERSONAL RESPONSE STRATEGIES

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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

December 2002

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ABSTRACT

This report describes a program for improving inconsistent reading comprehension. The targeted population consisted of first, third, and fifth grade classrooms in a diverse middle class community located in Illinois. The problems of low academic achievement were documented through teacher observation, reading comprehension test scores, and low report card grades.

Analysis of probable cause data revealed that parental expectations for the success of children, poverty, and lack of literacy experiences in the home were contributing factors. In the classroom a lack of effective reading strategies and inconsistent teaching theories contributed to reading comprehension problems. Low self-efficacy in the students also played a part in the difficulty.

A review of solution strategies suggested by experts resulted in three possible interventions: appropriate graphic organizers, implementation of new teaching strategies in questioning classification process, and direct instruction provided by the instructors.

Post intervention data indicated more student involvement and interest in reading. The learners exhibited more organization skills, more internalization, and personal responsibility in learning. Finally, more effective instruction was provided by the teachers through the instruct, model, and coach and practice method.

SIGNATURE PAGE

This project was approved by

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Dean, School of Education

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CHAPTER 1

PROBLEM STATEMENT AND CONTEXT

General Statement of the Problem

The students of the targeted first, third, and fifth grade classes exhibited

inconsistent reading comprehension that interfered with academic achievement. Evidence

for the existence of the problem included a student survey, teacher observations, reading

comprehension tests, and low report card grades.

Immediate Problem Context

According to the Illinois School Report Card (2000), sites A and B had a

population of 215 students in grades kindergarten through eighth. This neighborhood

school had a racial ethnic background of 29.9% Black, 52.2% White, and 17.9%

Hispanics. The attendance rate was 95.6 %, the mobility rate was 12.1%, and low-income

students were 24.4% of the population. There were no limited English proficient speaking

or truant students.

There were nine certified regular education teachers with an average of 15.1 years

of experience. Sites A and B also had one non-certified teacher assistant, a Learning

Disability Resource teacher with a part time teacher who served as her aide, and a

Reading Recovery teacher. Other staff members included a principal, secretary, speech

pathologist, occupational therapist, and psychologist. A nurse, counselor, and certified music and physical education instructors also serviced the students once a week. Three staff members had masters and all staff was female, with the exception of the custodians.

In addition to the core curriculum, speech and language, counseling, occupational and physical therapy, Reading Recovery, and learning disability resources were available to qualifying students. Sites A and B offered an after school tutorial program during the school year to grades 1 through 4 for 18 weeks to increase reading achievement.

The P.T.O. and community were involved in Sites A and B. The P.T.O. paid for and planned assemblies and an Art Smart program for all grades to address the Illinois' Fine Arts standards. A Junior Achievement Program was part of the curriculum, grades 1, 2, and 6 were involved in a D.A.R.E. program, and grades 4 through 8 were involved in a banking program called Bank at School. School volunteers included both parents of students and retired community members.

There were a number of extra-curricular activities offered at Sites A and B. These included Builders Club, an extension of Kiwanis, Student Council, Conflict Resolution Club, Homework Haven, intramurals for grades 3 through 6, and the Stock Market Club.

The Illinois School Report Card (2000) stated that sites C and D had a school population of 172 students in kindergarten through eighth grade. This school had a racial ethnic background of 89.5% Black, 5.8% White, and 4.7% Hispanic. Attendance was 94.8%, mobility was 38.1%, and there were 89.5% low-income students. There were no chronic truant students or limited English proficient-speaking students at this site.

Sites C and D had 11 certified, regular education teachers, 5 teacher assistants, 1 special education teacher, 1 Title One teacher, and 1 Reading Recovery teacher. The staff

had an average of 17.5% years of teaching experience. Other staff included a principal, secretary, speech pathologist, and psychologist. A nurse, counselor, and certified gym and music teacher saw the children once a week. Five staff members held a master's degree. The staff was predominantly female with the exception of one certified male teacher in the building along with two male custodians.

The curriculum in sites C and D was based on the state goals and standards as well as those objectives set by the district. Speech and language, Reading Recovery, learning disabilities resources, and Title One enhanced that core curriculum. Sites C and D offered after school tutoring, an outdoor education program called Frog in the Bog, KidZMart, an on-line economic program, Accelerated Reading program, and a mentoring program through a local business. D.A.R.E. programs were conducted at the first, second, and sixth grades levels.

This site had no active P.T.O. The administrator and staff funded and oversaw most of the students' extra-curricular activities. Math Mavericks, Student Council, Kids in Motion, and Homework Club were after school clubs available to the students.

Both sites were in small, one-story buildings that are approximately 40 years old. They are neighborhood schools that had been converted to kindergarten through eighth grade facilities. Each building houses one classroom per grade, one restroom for the students, and a multi-purpose room used for gym and lunch. A hot lunch program has been offered to students, and those who qualified, could apply for free or reduced lunches.

Overcrowding was an issue at both school locations. This caused the district to plan an expansion on the building that housed Site A and B. At Site C and D it was necessary to move the library into a mobile unit to deal with the increase in enrollment.

A summer school program funded an ISBE grant that focuses on reading comprehension, writing and math skills through literature was offered to students at both sites. Students qualified for these programs based on achievement and state assessment scores and teacher recommendations. The junior high students had the opportunity to participate in district sports programs and instrument and band lessons were offered to the students in grades 5 through 8.

The Surrounding Community

This school district is located in the southern suburbs of a major city in the state of Illinois. The United States Census (2000) reported the city had a population of 45% Caucasians, 37.9% Blacks, 23.8% Hispanics, and 0.4% other ethnicities that made up the remaining population of the community that totaled 32,776. English as a second language was reported by some of the residents. The primary religions of the area were Protestant with the Catholic Church also represented (Illinois Department of Commerce & Community Affairs, 2000).

The median family income for the community was $32,000.000 according to the Census of Population and Housing (1992). The primary occupations included laborers and many held minimum wage jobs. The homes ranged in value from less than $15,000.00 to $250,000.00. The majority of structures on average sold between $50,000.00 to $100,000.00 (United States Census, 2000).

This elementary school district was composed of 12 buildings. One school houses early childhood programs, nine were kindergarten through eighth grade, one was fourth through eighth grade, and the remaining was preschool through fourth grade. Three assistants with average salaries of $71,411.00 supported a superintendent whose salary was $115,471.00. The equalized assessed valuation per pupil was $69,243.00, the total school tax rate per $100.00 was $5.06, instructional expenditure per pupil were $4,024.00, and operating expenditure per pupil was $6,941.00. The state's instructional expenditure per pupil was $4,291.00 and its operating expenditure per pupil was $7,146.00 (Illinois School Report Card, 2000).

The district schools were located in diverse areas: middle-class neighborhoods, unincorporated areas, apartment complexes, and federally subsidized housing. Many of the children came from homes headed by single parents. Generally, there was not a lot of parental involvement or community support in the schools.

National Context of the Problem

Reading and comprehension are not only local school issues but also a nationwide problem in both society and the educational community. The number of journal articles, periodicals, books, and websites devoted to reading clearly indicates this is a concern throughout the United States. The lack of reading success has been reviewed in a variety of forums "ranging from societal demands and government mandates to parent expectations" (Rashotte, MacPhee, Torgeson, 2001).

In a country that has been described as "the world's richest and most productive" (The Economist, 1995), almost 48% of citizens have inadequate literacy skills.

The reading level of these adults is severely limiting. They cannot

understand the instructions on an appliance warranty, find an intersection

on a street map, or locate two pieces of information in a sports article

(America's Literacy Champion, 2000).

This lack of literacy skills leads to poverty, unemployment, crime and imprisonment, and

contributes to the cycle of illiteracy in children (American Literacy Champion, 2000).

As with all of societies issues, the various levels of government often step in to

identify the problem before solutions can be sought. The President of the United States,

George W. Bush, involved education in his 2000 campaign. He saw illiteracy as a

"scandal...seen most clearly in high-poverty schools where nearly 70% of fourth-graders

are unable to read at a basic level." (Bush, 2000). Rod Paige, United States Secretary of

Education, in testimony before the Senate Budget Committee, agreed with Bush's

statistics. He expanded the focus of the issue to include "disadvantaged and minority

students" (Paige, 2001). He also quoted the National Assessment of Educational Progress

statistics of reading performance. Paige stated only 40% of Hispanic students and 36% of

African American students were able to read on or above basic levels (Paige, 2001).

Statistics demonstrate that many parents in the United States value reading. In a

study done on parent involvement in education, a questionnaire given to families in a St.

Louis, Missouri school showed "95% of the parents felt that reading is very important."

(Anderson, 2000). Another source stated 90% of the children of college-educated

mothers were read to 3 or more times a week (Research: Literacy facts and figures,

2001). These parental attitudes and educational concerns have influenced the direction of

the current administration's allocation of monies. They have budgeted millions in

programs that "reflect…a strong consensus, both within the Congress and among the American people" (Paige, 2001) that students performance must improve (Paige, 2001).

Recent literature and statistics show literacy is a local and national problem. It is of concern to families, educators, and government. In order to better prepare children to face the complex world and society they live in, it is not enough just to acknowledge reading and comprehension inconsistencies. The literacy issue must be addressed in our nation's schools and resolved.

Chapter 2

PROBLEM DOCUMENTATION

Problem Evidence

In order to document inconsistent reading comprehension, a teacher observation checklist was completed at each site. A reading comprehension assessment was given to the students involved in the study and they were also given a survey to complete which assessed self-efficacy. Of the 92 students at the four different sites, all were involved in this process. The Teacher Observation Checklist, and student Reading Survey are found in Appendices A,B, and C.

The results of the Teacher Observation Checklists are found in Tables 1, 2, 3, and 4. The reading comprehension test scores are found in Figures 1, 2, 3, and 4. Self-efficacy survey results are located in Table 5.

Table 1

Teacher Observation Checklist-Site A

1.) Recognize letters	
-Frequently	25
-Sometimes	5
-Not yet	0
2.) Identify sound/letter relationship	
-Frequently	25
-Sometimes	5
-Not yet	0
3.) Apply decoding/word attack skills	
-Frequently	4
-Sometimes	23
-Not yet	3
4.) Read for understanding	
-Frequently	6
-Sometimes	18
-Not yet	6
5.) Read a variety of texts independently	
-Frequently	7
-Sometimes	22
-Not yet	1

At Site A, 25 of the 30 students were in the frequently recognizes letter category.

Five of the students were in the sometimes recognizes letter category and none

were in the not yet able to recognize letters category. Twenty-five of the 30

students at Site A could frequently identify sound/letter relationships. Only five of

the students were in the sometimes classification. None of the students fell in the

not yet range. At this same site, 4 of the 30 students could frequently apply

decoding/word attack skills. Twenty-three students fell in the sometimes category

and three students in the not yet category. Six of the 30 students could frequently

read for understanding where as 18 students fell in the sometimes category and six in the not yet category. Six of the 30 targeted students frequently read a variety of texts independently. Twenty-two students fell into the sometimes category and only one in the not yet category for reading a variety of texts independently.

Table 2

Teacher Observation Checklist-Site B

1.) Apply word attack skills	
-Frequently	12
-Sometimes	6
-Not yet	3
2.) Forms questions and predictions	
-Frequently	7
-Sometimes	14
-Not yet	0
3.) Monitors comprehension and remediation	
-Frequently	8
-Sometimes	9
-Not yet	4
4.) Can create visual aids and graphic organizers	
-Frequently	7
-Sometimes	9
-Not yet	5
5.) Interprets a variety of genres	
-Frequently	8
-Sometimes	10
-Not yet	3

At Site B, 12 of the 21 targeted students were frequently able to apply word attack skills. Six of these students were sometimes able and three were not yet able to apply word attack skills. Seven of the students formed questions and predictions

frequently. Fourteen of the students sometimes formed questions and predictions where as, none of the students were not yet able to do this. Eight of the targeted 21 students frequently monitored comprehension and remediation. Nine of the students sometimes used this monitoring skill and four were not yet able to monitor comprehension and remediation. Of the 21 targeted students, seven could frequently create visual aids and graphic organizers. Nine sometimes were able and five were not yet able to create visual aids and graphic organizers. At Site B, eight of the students interpreted a variety of genres frequently, ten sometimes, and three not yet.

Table 3

Teacher Observation Checklist-Site C

1.) Recognize letters	
-Frequently	19
-Sometimes	0
-Not yet	0
2.) Identify sound/letter relationship	
-Frequently	14
-Sometimes	4
-Not yet	1
3.) Apply decoding/word attack skills	
-Frequently	10
-Sometimes	8
-Not yet	1
4.) Read for understanding	
-Frequently	18
-Sometimes	0
-Not yet	1
5.) Read a variety of texts independently	
-Frequently	13
-Sometimes	1
-Not yet	5

At Site C, 19 of the 19 students were in the frequently recognizes letters category. None of the students were in the sometimes or not yet categories. Fourteen of the 19 students at Site C could frequently identify sound/letter relationships. Only four of the students were in the sometimes classification and one student was not yet able to identify sound/letter relationships. At this same site, 10 of the 19 students could frequently apply decoding/word attack skills. Eight students fell in the sometimes classification and one student in the not yet classification. Eighteen of the 19 students could frequently read for understanding where as only one student was not yet able. Thirteen of the 19 targeted students frequently read a variety of texts independently. One student fell into the sometimes category and five in the not yet category for reading a variety of texts independently.

Table 4

Teacher Observation Checklist-Site D

1.) Apply word attack skills	
-Frequently	7
-Sometimes	4
-Not yet	3
2.) Forms questions and predictions	
-Frequently	5
-Sometimes	3
-Not yet	6
3.) Monitors comprehension and remediation	
-Frequently	5
-Sometimes	2
-Not yet	7
4.) Can create visual aids and graphic organizers	
-Frequently	0
-Sometimes	4
-Not yet	10
5.) Interprets a variety of genres	
-Frequently	0
-Sometimes	6
-Not yet	8

At Site D, 7 of the 14 targeted students were frequently able to apply word attack skills. Four of these students were sometimes able and three were not yet able to apply word attack skills. Five of the students formed questions and predictions frequently. Three of the students sometimes formed questions and predictions where as, six of the students were not yet able to do this. Five of the targeted 14 students frequently monitored comprehension and remediation. Two of the students sometimes used this monitoring skill and seven were not yet able to monitor comprehension and remediation. Of the 14 targeted students, none was

able to frequently create visual aids and graphic organizers. Four sometimes were able and 10 were not yet able to create visual aids and graphic organizers. At Site D, none of the students interpreted a variety of genres frequently, 6 fell into that category, and 8 not yet.
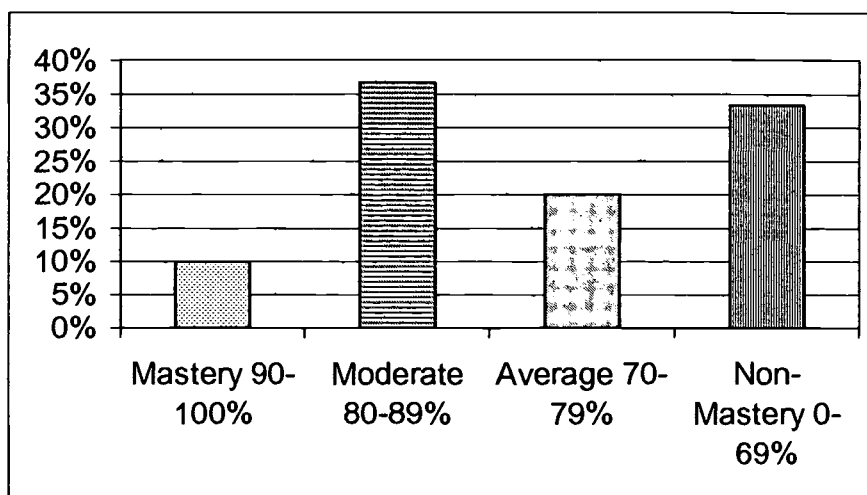
Figure 1 – Site A Reading Test Scores

Figure 1 shows the results of the pretest on reading comprehension. In this pretest

of reading comprehension, 10% of the students showed mastery, 37% of the

students had a moderate understanding of the content, 20% of the students had an

average understanding on the content, while 33% of the students had little content

understanding.

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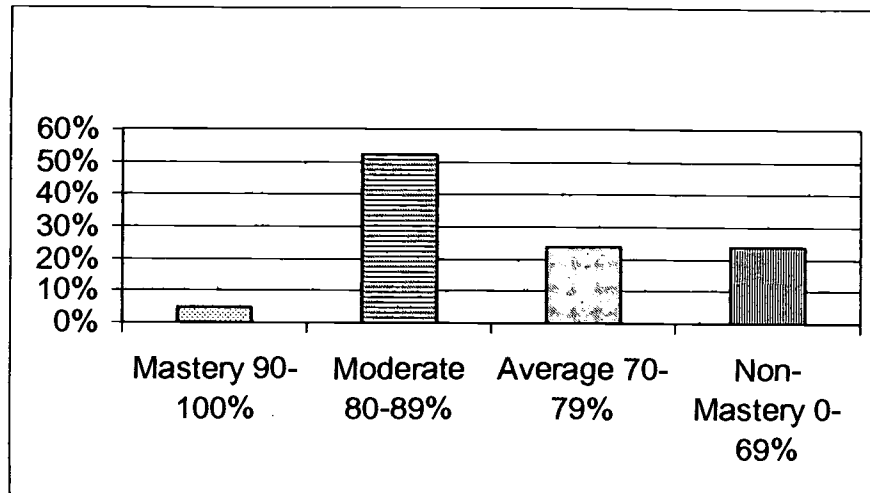
Figure 2 – Site B Reading Test Scores

Figure 2 shows the results of the pretest on reading comprehension. In this pretest

of reading comprehension, 5% of the students showed master, 52% of the students

had a moderate understanding of the content, 24% of the students had an average

understanding of the content, while 24% of the students had little content

understanding

Figure 3 – Site C Reading Test Scores

Figure 3 shows the results of the pretest on reading comprehension. In this pretest

of reading comprehension, 0% of the students showed mastery, 26% of the

students had a moderate understanding of the content, 32% of the students had an

average understanding of the content, while 42% of the students had little content
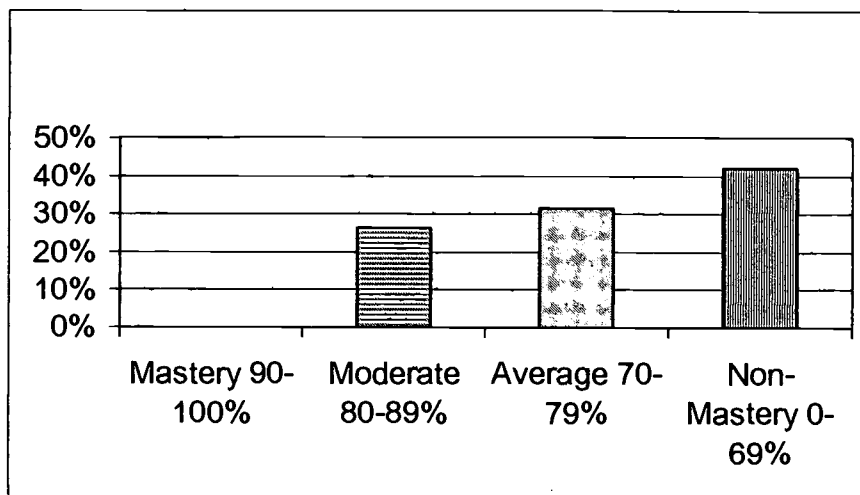
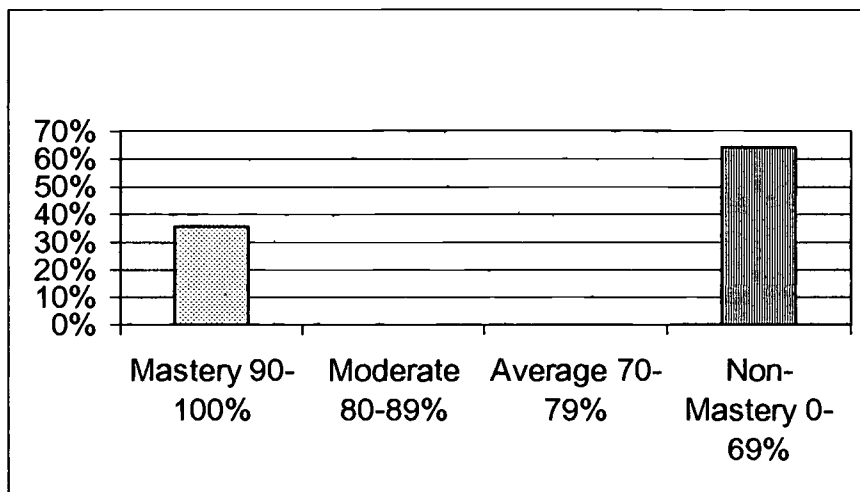understanding.

Figure 4 – Site D Reading Test Scores

Figure 4 shows the results of the pretest on reading comprehension. In this pretest

of reading comprehension, 36% of the students showed master, 0% of the students

had a moderate understanding of the content, 0% of the students had an average

understanding of the content, while 64 % of the students had little content

understanding.

Table 5

Student Reading Survey

	Site A Comfortable	Site A Frustrated	Site B Comfortable	Site B Frustrated	Site C Comfortable	Site C Frustrated	Site D Comfortable	Site D Frustrated
How do you feel about reading at home?	29	1	18	3	17	2	10	4
How do you feel when you read a book at school?	27	3	17	4	14	5	8	6
How do you feel about spending time reading at school?	29	1	15	6	13	6	9	5
How do you feel about reading a new book or story?	28	2	21	0	12	7	8	6
How do you feel about predicting before you read?	26	4	11	10	13	6	9	5
How do you feel when you come to a word you don't know?	13	16	11	11	6	13	1	13
How do you feel when something you read does not make sense?	10	20	11	10	11	8	2	12
How do you feel when you are asked questions about what you have read?	30	0	14	7	11	8	10	4
How do you feel about using a graphic organizer?	30	0	15	6	14	5	6	8
How do you feel about yourself as a reader?	30	0	16	5	12	7	9	5

At Sites A, B, C, and D the majority of children felt comfortable with their self-perception of themselves as readers. At Site A the only areas the children felt frustrated were decoding unfamiliar words and making sense of their reading. The Site B student survey also show frustration with word decoding and comprehension of text. At Site C the students show frustration with the same areas plus increased frustration with the questioning process in reading comprehension. Site C data showed extreme frustration with the decoding and comprehension process.

Probable Causes

The literature on reading problems in today's schools suggests a number of essential causes for learners' deficiencies in reading. Parental roles, poverty, lack of literacy experiences, lack of effective reading strategies, inconsistent teaching theories, and low self-efficacy all contribute to the statistic reported by President George W. Bush that "...nearly 70% of the fourth graders are unable to read at a basic level"(2001). These problems add to the inconsistency of students' reading comprehension and this ultimately affects overall scholastic achievement.

Educators have always expressed the importance of the parental role in the acquisition of an education. Spiegal (1992) supported this by stating "The parental role in the development of children who both can and will read is enormous" (p. 13). According to Spiegal, parents who expect success for their children and teach the importance and value of education begin the process that leads to thriving academic achievement. The researcher stated that these are the parents who believe their role is to show a love of reading through both example and environment. These involved parents also know that positive interaction between home and school leads to the creation of lifetime learners.

Anderson (2000) also supported parental involvement and stated that parents are obligated to take part in their child's education throughout their school career and stressed how significant they are in their child's success. The researcher found that parent involvement is a true means to "stimulate their child's adult intelligence and lay the foundation for formal reading instruction" (pp. 61-63).

Poverty contributes to poor reading comprehension. Statistics show that illiteracy is more prevalent in school's where poverty is an issue. President George W. Bush acknowledges that 70% of "...fourth graders in our highest poverty schools cannot read a simple children's book"
(Issues 2001, 2001, para. 1).

The lack of early exposure to literature contributes to poor reading abilities as well. Bower (1999) reported the reason behind poor fourth grade test results in Illinois stemmed from a deficiency in literacy experiences and not low intelligence. Research also supports the fact that low achievement is a direct result of children who come "ill-prepared to learn to read in the early grades" (Bower, 1999).

Interaction with the text is essential to comprehension. Consequently, the extent to which readers interact with the text affects how they comprehend the content of what they are reading. Literal reading limits what the reader will understand (Hurst, 2000). Reading experts Pressley and Wharton-McDonald supported this theory when they stated, "If there is little overlap between the reader's knowledge and the text content, then there is risk that comprehension will be low" (1997, p. 449). They also recognized that even readers with broad background knowledge do not always use it effectively to interrelate with the text.

Low self-efficacy contributes to limited or inaccurate comprehension. The way in which people perceive themselves as readers influences how they comprehend. According to Foertsch (as cited in Casteel & Isom, 2000) individuals who possess "...superior reading achievement..." do so because of

their positive self-image. Henk & Melnick (as cited in Casteel & Isom, 2000) expanded on the role of self-perception in reading.

> They asserted that reader self-perceptions (self-efficacy
> judgments about one's ability to perform) could affect an
> individual's overall orientation to the process of reading,
> influence choice of activities, affect a continued
> involvement, and ultimately affect achievement (p. 68).

Inconsistency in teaching theories negatively affects the learning process of the reader. Theorists in the field fluctuate between teaching reading using phonics based or whole language instruction. Sternberg, Grigorenko, and Jarvin (2001) defined phonics as the relationship between sounds and letters in text and whole language as "reading whole text in their natural context" (p. 48). The focus of phonics-based instruction overlooks reading comprehension and dwells on the decoding of words. Whole language does not always provide the opportunity to learn decoding that is necessary for comprehension (Pressley, 1997, p. 448). "One reason that more children do not have the reading skills that they need is that experts in the field of reading have become locked in a senseless battle, which has generated much heat, little light, and even less improvement in the reading skills of children" (Sternberg, et al., 2001, p. 48).

CHAPTER 3

THE SOLUTION STRATEGY

Literature Review

Transactional strategy instruction is one tool research has proven to be effective in improving reading comprehension. Brown et al. (1995) explained "First, readers are taught that text meaning does not lie in the text alone, or only in the readers mind, but in the transaction between them"(p. 256). The researcher went on to state that students work as a group to determine the implications of the passage. From that discussion the teacher selects the focus and appropriate strategies that will assist the learner in comprehending the text. Brown concluded, "because the instruction we watched was transactional in all these aspects, we call it transactional strategies instruction (TSI)" (p. 256).

Pressley (1997) supported Brown's investigation of second grade students with further evidence. The researcher gave credit to Brown et al. along with educators Cathy Collins and Valerie Anderson who performed classroom studies using TSI with both regular education and learning disabled students. The results in all studies showed reading comprehension improvement using both qualitative and quantitative methods of assessment. Pressley concluded, "Transactional strategies instruction is the best validated approach to comprehension instruction in the 1990s..."(p. 456).

Researchers have also reported that the able readers with the most ability use reading strategies to assist them in comprehending text. Brown (1995) stated that the readers "coordinate multiple strategies to improve their understanding and memory of text..."(p. 256), and that this is not done without guidance. The students must be taught to become strategic, and a tool that has been investigated and analyzed in the reading field by researchers that assist this learning process is the graphic organizer.

Griffin, Malone, and Kameenui (1995) conducted a study on the effectiveness of graphic organizers in a fifth grade normal achieving classroom. The researchers directly instructed the students on using organizers with content material. Griffin reported " ...participants receiving the graphic organizer and explicit instruction performed better on the measure of transfer than students who received traditional basal instruction did" (p. 98).

Research has also shown that graphic organizers can help learners become skilled at strategies and better understand text. When teaching the students to become more strategic when reading, Jongsman (1999/2000) stated "...story maps, story webs, plot relationship charts, KWL (What I Know – What I Want to Learn – What I Learned) and KWLQ charts (adding a category for new questions I've generated) work well to help students comprehend texts" (p. 310). This notion was supported by Griffin (1995) when it was reported that students who were given teacher created graphic organizers demonstrated improved comprehension. The researcher stated "Students provided with these expert examples of the graphic organizers were able to transfer knowledge of these

examples to novel textual material" (p.106). Griffin went on to report that the examples also taught students how to read to learn expository text.

Casteel (2000) supported Griffin and added that the students must learn which organizer to use with specific genres. The researcher stated, "This should help students become more skilled in recognizing characteristics and patterns of the text because selection and use of the graphic will have to be congruent with the way the material is presented in the text" (p.72). Casteel also said that the instructional process does not only involve teaching the students when and how to use this thinking tool. The pupils, according to the researcher, must also learn to eventually verbalize their reason for choosing a specific organizer to assist them in demonstrating text comprehension. Smith, in 1997, verified this point and also stressed that language was an important tool to use to assist the learners in improving their reading achievement.

Smith attempted to see the effect of vocabulary development on reading comprehension using graphic organizers with dialogue. The researcher used visual maps and discussion to develop new vocabulary. The students were encouraged to make analogies because it was believed that "…analogies are a useful way of encouraging thoughtful discussion about relationships among meanings of words" (p. 3). This taught the learners the content vocabulary and Smith reported comprehension improved, but it was also the result of the teacher directly instructing the students.

Jongsman (1999/2000) further investigated explicit instruction in using graphic organizers. The researcher stated the teacher played a key role when

engaging the learners in graphic organizer instruction. The researcher suggested
that the instructor model not only how and when to use the graphic organizer but
also how to verbalize their thought processes while reading. The strategy that was
suggested by Jongsman was the think-aloud methodology.

> I believe that the teacher needs to model the necessary vocabulary
> and comprehension process for students, and think-alouds and
> think-alongs help students see how a proficient reader (the teacher
> in this case) engages with text and works out the author's meaning.
> I know that think-alouds and think-alongs also offer excellent
> opportunities for teachers to assess students' developing
> comprehension processes (p. 310-311).

Other investigators have supported using think-alouds as a tool to utilize when
instructing students in reading. The researchers have also gone on to articulate
that this methodology is also a beneficial tool to employ to teach the readers how
to use questions and questioning to improve comprehension.

When implementing TSI into curriculum, Casteel (2000) outlined three
specific stages for the instructor to follow and all involved questions and
questioning. In stage one, the instructor is the leader who asks questions and
explains how answers are derived by thinking aloud. In stage two, the students are
coached in applying reading strategies by the teacher asking process questions
which necessitate the students to explain their thinking, and stage three continues
the questioning process. The researcher stated "…teachers need to phase students

into this metacognitve process by modeling, coaching, then gradually transferring the responsibility to the students" (p. 68).

Ezell (1997) reported that the students who were taught the Question Answer Relationship (QAR) strategy improved reading comprehension as well. The strategy incorporated three of the four Raphael questions (Right There, Think and Search, Author and You, and On My Own). Extensive time was devoted to instructing the learners in classifying a question into one of the categories while using the text or their own knowledge to thoughtfully respond. This strategy verified improved reading achievement and the researcher stated "…that students outperformed those who do not learn the strategies in answering reading comprehension questions" (p. 365).

Rosenshine (1996) believed that an effective way to focus students on content material being read was to teach them to generate questions on their own. The research revolved around the teacher creating questions about the text using signal words and generic stems. Instruction in question generation moved form guided to student centered and Rosenshine reported "Overall, teaching students the cognitive strategy of generating questions about the material they had read resulted in gains in comprehension…" (p. 181). Gauthier, in 2001, continued to investigate not only questioning, but the effects of combining questioning with cooperative learning and discussion.

Cooperative learning is a strategy that has been proven to enhance learning. Schools have been engaging students in this learning process that is known to involve students in roles and instructional methods to reach a common goal, because they will be asked to work in this manner when they enter the real world. Gauthier said that as the students become involved in the activity, learning is taking place, the students engage in higher level thinking tasks and discussions, improve their communication abilities, and develop their social skills. The research reported that "When students work together, communicate their thoughts, and seek answers to different questions, reading comprehension has a fertile setting to which to occur" (p. 218) and this has been know to occur at the three different reading stages: before reading, during reading, and after reading.

In 1999, Klinger conducted an investigation in a classroom of 10 and 11 year old students who varied in their ability levels and primary language. The researcher had the teacher use a reading strategy known as collaborative strategic reading (CSR) instruction to improve their comprehension. The strategy combined cooperative learning and direct instruction in specific reading strategies, one of which was previewing and predicting.

In Klinger's CSR's pre-reading stage, the teacher strived to activate the learner's thinking and get the learner ready to learn. The learner was engaged in teacher created who, what, when, and where questions about the text. Students shared knowledge they already had on particular subjects, and the learner looked at content reading headings, italicized or bolded words, pictures, tables, and graphs, and information located in margins and columns to get ready to read.

They also brainstormed, journaled, and discussed what they thought they would learn or what they predicted would happen in a story. The results showed that "comprehension strategy instruction has improved learning opportunities for students with learning disabilities and limited English proficient students" (p. 738). Klinger also reported "CSR has consistently yielded positive findings in investigations of its effectiveness" (p. 738). Carter also supported predicting in the 1997 study of Reciprocal Teaching.

Carter chose to investigate the effects of Reciprocal Teaching with both high school and elementary students in an at-risk school district. This strategy was chosen for a number of reasons. First, the researcher felt that the philosophy of Reciprocal Teaching was one that was comparable to more current reading definitions because this strategy "…describes the process of reading as an interactive one, in which readers interact with the text as their prior experience is activated" (p. 66). Also, Carter said that the focus was on improving reading achievement and metacognition using four strategies, one of which was predicting, and there were many opportunities for the teacher to use the strategies and emphasize them during the course of a school day so it was practical.

The result of the study affirmed that intensive teaching of Reciprocal Teaching improves reading achievement. An increased number of the district high school students received endorsed diplomas when compared tithe previous year, and Carter proposed that this meant "…students were learning how to learn and were understanding more of what they read" (p. 68). In the elementary level,

fourth grade students' doubled their reading scores in one year after they had already engaged in intensive Reciprocal Teaching tutoring in the previous grade.

The student successes confirmed to Carter that the objective of stimulating the achievement of the students was being addressed in the district by incorporating educational strategies into the curriculum. Other researchers, however, have taken on a different approach to improve comprehension. These investigators have chosen to look closely at how the student perceives himself as a reader and whether changing the student's self-perception will affect reading comprehension.

Casteel (2000) conducted an investigation of 20 students involved in a reading clinic over a summer. The purpose was to find out if a proven strategy to improve reading comprehension, TSI, would also change the way the students looked at themselves as readers. The researcher wanted to see "If readers learn to become consciously strategic in the use of these multiple strategies to improve their understanding and memory of text, do they also alter their views of their own competence as readers?" (p. 68).

TSI focuses on the process of learning to comprehend. The study showed that transferring responsibility for choosing and applying predicting, monitoring comprehension, questioning and question classification, and using graphic organizers and discussion proved to be effective in the classroom. Students' reading comprehension was enhanced. Casteel added that TSI does also "…affect reading self-efficacy" and "This makes it a feasible addition to teachers' repertoires of instructional methods" (p. 74).

Casteel sited a 1997 study by the National Assessment of Educational

Progress (NAEP). The researcher said it was reported that the majority of students

in America score at the basic level or below when comprehension was tested and

the number of learners who were able to demonstrate higher-level comprehension

was calculated to be less than 5%. These statistics demonstrate to the researcher

that American students will not be ready to "meet societal, educational, and

employment demands in thinking and comprehension" (p. 74). Casteel stated that

this, along with the NAEP data, supports the fact that methods employed in our

schools for teaching comprehension must be improved.

The following project objectives, processes, action plan, and assessments

were developed in the fall of 2001.

Project Objectives

As a result of applying predicting, monitoring comprehension and
remediation, organizing information, and personal response strategies
during the period of January 2002 to May 2002, the targeted Sites A, B, C,
and D will increase reading comprehension, as measured by pre-and-post
testing, observational checklists, and a student attitudinal survey.

A. In order to accomplish the project objective, the following processes
    are necessary:
    1.   The physical environment of the classrooms will
         include visual aids of graphic organizers.
    2.   New materials will be created to assess and assist
         instruction.
    3.   New teaching strategies will be implements and
         taught as part of the intervention (before, during,
         and after questioning and graphic organizer
         instruction).
    4.   The existing reading program will be changed to
         implement the new teaching strategies.

Action Plan

This action plan has been developed to cover a 12-week period. The following strategies have been selected to assist the learners while reading and consequently improve their overall reading comprehension:

Predicting

Question Classification

Monitoring Comprehension and Remediation

Organizing Information

Personal Responses

When instructing the students in these strategies, the following visual aids and graphic organizers will be used:

Predicting Graphic Organizer

KWL Graphic Organizer

Remediation of Comprehension Problems Visual Aid

Organizing Information Graphic Organizers (Venn Diagram, Sequence Flow Chart, Main Idea and Supporting Detail Web)

Question Classification Visual Aid

Personal Response Visual Aid

Week One

Administer Reading Survey to students

Administer reading comprehension pre-test to students

Administer Teacher Observation Reading Checklist on each student

Week Two

Tabulate and graph results of student reading survey, pre-test, teacher

observation reading checklist

Week Three

Teach and model the strategy of predicting using the think-aloud

methodology by:

Introducing the title, author, and illustrator of the story

Taking a picture walk of the story with the students

Posing literal and critical thinking questions to the students that

revolve around the story

Recording predictions on a graphic organizer to confirm their

validity after reading the story

Teach the students the two types of questions (factual or Skinny and

higher level or Fat) and Raphael's four question categories: *Right There,*

Think and Search, Author and You, and *On My Own*

Using the question classification visual aid and a pre-selected story, teach

and model how to classify questions as Fat or Skinny, determine which of

Raphael's four group it belongs, and how to respond to each type of

question by using the think-aloud methodology

Week Four

Review and model using the predicting strategy by using the think-aloud methodology by:

Introducing the title, author, and illustrator of the story

Taking a picture walk of the story with the students

Posing literal and critical thinking questions to the students that revolve around the story

Recording predictions on a graphic organizer to confirm their validity after reading the story

Review the characteristics of factual or higher level questions and Raphael's four question categories: *Right There, Think and Search, Author and You,* and *On My Own*

Using the question classification visual aid and a pre-selected story, review and model how to classify questions as Fat or Skinny, determine which of Raphael's four group it belongs, and how to respond to each type of question by using the think-aloud methodology

Teach purpose and model using a Venn diagram, sequence flow chart, or main idea web to organize story information using visual aid and the think-aloud methodology

Week Five

Practice and coach students using the strategy of predicting following week three guidelines and classifying and responding to questions following week four guidelines

Pose the following questions to the students during coaching that require them to evaluate their predicting, question classification, and thinking processes:

Why did you make the predications that you did?

What helped you decided that the question was Fat? Skinny?

What information from the story will you use to answer the question?

How did you determine the question was part of the group *Right There? Think and Search? Author and You? On My Own?*

Teach and model how to monitor comprehension using the think-aloud methodology on a pre-selected story

Teach and model how to use the remediation strategy when discovering comprehension problems using the remediation visual aid and the think-aloud methodology

Teach purpose and model using a Venn diagram, sequence flow chart, or main idea web to organize story information using visual aid and the think-aloud methodology

Week Six

Practice and coach students using the strategy of predicting and classifying and responding to questions following the week five guidelines

Practice and coach students monitoring comprehension and using a remediation strategy when discovering comprehension problems

Pose the following questions to the students during coaching that require them to evaluate their comprehension monitoring and remediation choice:

How did you know you did not understand what you read?

Why did you choose the strategy that you did when you discovered you did not understand what you read?

Did the strategy fix your comprehension problem?

Practice and coach students on choosing an appropriate graphic organizer to use with a specified story

Pose the following questions to the students during the coaching that require them to evaluate their choice, thinking process, and its usefulness:

Why did you choose this graphic organizer to help you understand the story?

How will this graphic organizer help you?

How did you know to choose this particular graphic organizer?

Week Seven

Practice and coach students using the strategy of predicting and classifying and responding to questions following week five guidelines

Practice and coach students monitoring comprehension and using a remediation strategy when discovering comprehension problems

Pose the following questions to the students during coaching that require them to evaluate their comprehension monitoring and remediation choice:

How did you know you did not understand what you read?

Why did you choose the strategy that you did when you discovered you did not understand what you read?

Did the strategy fix your comprehension problem?

Practice and coach students on choosing an appropriate graphic organizer to use with a specified story

Pose the following questions to the students during coaching that require e them to evaluate their choice, thinking process, and its usefulness:

Why did you choose this graphic organizer to help you understand the story?

How will this graphic organizer help you?

How did you know to choose this particular graphic organizer?

Teach and model how to personally respond to literature using the personal response visual aid and the think-aloud methodology with the following questions:

What was your favorite part of this story?

Who was your favorite character and why did you choose that character?

What did you learn form this story?

What adjective would you use to describe the main character in the story? What story clues support your decision?

How are you similar or different to the main character in the story?

Week Eight

Require students to predict and classify and respond to questions when given a selected story

Pose the following questions to students during this phase that require them to evaluate their choices and to check their ability to apply these skills and their level of understanding:

Why did you make the predications that you did?

What helped you decided that the question was Fat? Skinny?

What information from the story will you use to answer the question?

How did you determine the question was part of the group *Right There? Think and Search? Author and You? On My Own?*

Require students to monitor comprehension and use a remediation strategy when discovering comprehension problems independently

Pose the following questions to students during this phase that require them to evaluate their choices and to check their ability to effectively perform this skill and use these strategies:

How did you know you did not understand what you read?

Why did you choose the strategy that you did when you discovered you did not understand what you read?

Did the strategy fix your comprehension problem?

Practice and coach students on choosing an appropriate graphic organizer to use with a specified story

Pose the following questions to the students during the coaching phase that require them to evaluate their choice, thinking process, and its usefulness:

Why did you choose that particular graphic organizer to help you organize the information in this story?

How did this graphic organizer help you?

What thinking skill using this graphic organizer is developing?

Practice and coach students on how to personally respond to literature using the personal response visual aid and the think-aloud methodology with the following questions:

What was your favorite part of this story?

Who was your favorite character and why did you choose that

character?

What did you learn form this story?

What adjective would you use to describe the main character in the

story? What story clues support your decision?

How are you similar or different to the main character in the story?

Week Nine

Require students to predict and classify and respond to questions when

given a selected story independently

Pose the following questions to students during this phase that require

them to evaluate their choices and to check their ability to apply these

skills and their level of understanding:

Why did you make the predications that you did?

What helped you decided that the question was Fat? Skinny?

What information from the story will you use to answer the

question?

How did you determine the question was part of the group *Right*

There? Think and Search? Author and You? On My Own?

Require students to monitor comprehension and use a remediation strategy

When discovering comprehension problems independently pose the

following questions to students during this phase that require them to

evaluate their choices and to check their ability to effectively perform this skill and use these strategies:

How did you know you did not understand what you read?

Why did you choose the strategy that you did when you discovered you did not understand what you read?

Did the strategy fix your comprehension problem?

Require students to select an appropriate graphic organizer when reading a pre-selected story to organize information

Pose the following questions to the students during this phase that require them to evaluate their choices and to check their understanding of the purposes of the graphic organizer:

Why did you choose that particular graphic organizer to help you organize the information in this story?

How did this graphic organizer help you?

What thinking skill using this graphic organizer is developing?

Practice and coach students on how to personally respond to literature using the personal response visual aid and the think-aloud methodology with the following questions:

What was your favorite part of this story?

Who was your favorite character and why did you choose that character?

What did you learn form this story?

What adjective would you use to describe the main character in the story? What story clues support your decision?

How are you similar or different to the main character in the story?

Week Ten

Require students to predict and classify and respond to questions when given a selected story independently

Pose the following questions to students during this phase that require them to evaluate their choices and to check their ability to apply these skills and their level of understanding:

Why did you make the predications that you did?

What helped you decided that the question was Fat? Skinny?

What information from the story will you use to answer the question?

How did you determine the question was part of the group *Right There? Think and Search? Author and You? On My Own?*

Require students to monitor comprehension and use a remediation strategy when discovering comprehension problems independently

Pose the following questions to students during this phase that require them to evaluate their choices and to check their ability to effectively perform this skill and use these strategies:

How did you know you did not understand what you read?

Why did you choose the strategy that you did when you discovered you did not understand what you read?

Did the strategy fix your comprehension problem?

Require students to select an appropriate graphic organizer when reading a pre-selected story to organize information

Pose the following questions to the students during this phase that require them to evaluate their choices and to check their understanding of the purposes of the graphic organizer:

Why did you choose that particular graphic organizer to help you organize the information in this story?

How did this graphic organizer help you?

What thinking skill using this graphic organizer is developing?

Require students to personally respond to literature independently by responding to the following questions orally and in writing:

What was your favorite part of this story?

Who was your favorite character and why did you choose that character?

What did you learn form this story?

What adjective would you use to describe the main character in the story? What story clues support your decision?

How are you similar or different to the main character in the story?

Week Eleven

Administer Reading Survey to students

Administer reading comprehension post-test to students

Administer Teacher Observation Reading Checklist on each student

Week Twelve

Tabulate and graph results of student Reading Survey, post-test, Teacher

Observation Reading Checklist

Methods of Assessment

In order to assess the effects of the interventions, three assessments

will be given. A survey documenting the reading attitudes of the students,

a teacher observational checklist to assess reading skills, and tests to

evaluate reading comprehension skills will be administered. All

assessments will be conducted before and after the implementation of the

project.

CHAPTER 4

PROJECT RESULTS

Historical Description of the Intervention

The objective of this project was to increase reading comprehension by applying prediction, monitoring comprehension and remediation, organizing information, and personal response strategies. Pre-and-post testing, observational checklists, and a student attitudinal survey would measure the results.

Site A

The initial task of the action research project was assessing and analyzing the baseline reading comprehension levels of the first grade students. A reading comprehension pre-test was administered to the students during Week 1, and provided preliminary data about the reading comprehension skills of the students. In addition, a reading survey was administered via individual interview to measure personal attitudes regarding reading. Finally, direct observation of each student reading aloud in a guided reading group determined the application of certain target reading strategies. This data was recorded on the teacher observation checklist. Results of student reading survey, pre-test, and teacher observation reading checklist were tabulated and graphed during Week 2.

Teaching, and modeling the strategy of predicting occurred by first introducing the title, author and illustrator through a teacher think-aloud method. Next, the concept of a picture walk was presented in the same fashion. The teacher modeled a simple class graphic organizer that depicted the children's predictions. In the first grade these procedures were followed until the instructor was confident of the level of understanding of the students.

As the learners became more familiar with the initial comprehension strategies, the use of literal and higher level thinking questions was introduced. This concept was presented as skinny and fat questions. This adaptation of Raphael's Four Question categories seemed more appropriate at the first grade level. The skinny questions were factual and appeared directly in the story. The fat questions involved higher-level thinking and required the students to analyze, synthesize and evaluate story information (Appendix D). Daily review was conducted until the learners could identify the different types of questions.

At the first grade level the use of graphic organizers began as a group activity. The Venn diagram was introduced to teach the skill of comparing information about characters, stories, and settings (Appendix E). After modeling the technique of using the Venn diagram, the thinking skill (comparing) was stressed. The use of a sequence flow chart for story progression was introduced and modeled (Appendix F). The same strategy of teaching and modeling the skill was used. The final graphic organizer, a main idea web, was presented and demonstrated to be used as a thinking tool to organize story information for recall and understanding (Appendix G).

After introducing and modeling the skills needed to improve comprehension at the first grade level, the teacher continued to practice and coach students to internalize the learning. Students were asked to respond to literature orally or through illustrations.

Administering the Reading Survey, and reading comprehension post-test concluded the study. The teacher completed a final reading checklist on each student. The results were tabulated and graphed for future analysis.

Site B

Weeks 1 and 2 were spent gathering and calculating data. The students were given a pre-test to measure their reading comprehension level at the onset of the action research, and a survey to determine their perception of themselves as readers. An observation checklist was also completed by the instructor to record the specific reading strategies and skills each student possessed and applied during the reading process.

Teaching the skill of predicting and Raphael's four types of questions began the direct instruction process in the fifth grade (Appendix H). The students were also trained in how to classify a question into one of the four Raphael categories and monitor their comprehension. Instruction in understanding and applying remediation strategies was also addressed.

The Venn diagram, sequence flow chart, and main idea web were the graphic organizers chosen for the research (Appendices E, F, and I). Each organizer's purpose was taught, the thinking skill that the organizer used was explained, and how to use them to improve or demonstrate comprehension was

established. The graphic organizers were also available for learners to use at their own discretion on a labeled shelf in the classroom.

All of the reading strategies and skills used in the research were taught in a similar manner. The strategy or skill was taught, modeled, and reviewed by the instructor using the think-aloud methodology and practiced and coached by the students. The responsibility for learning and implementing them was therefore gradually transferred from teacher to learner.

During the coaching portion of the research, questions were posed to the students. The purpose of the questions was to get the learners to begin to monitor their thinking and comprehension and evaluate their choices. Visual aids were also available to the learners and the action research agenda was reinforced consistently throughout each day of the week. This was possible because the students remained with the researcher for all subjects except social studies, gym, music, and library which were offered to the students once a week.

During the course of the study, certain effects were stressed by the researcher. When the students were engaged in predicting, guided discussion was initiated and the focus was to evaluate the predictions made for their validity based on text clues. Responding completely and thoughtfully both orally and in writing was also stressed. What this entailed was having the students analyze their responses to be certain they were full and well contemplated.

Remediation modeling and discussion also occurred more often than planned during the research. It became evident at the onset of the study that the

students with the most need to monitor their comprehension and apply remediation strategies needed more guidance than was anticipated.

Before concluding the study by post-testing the students' comprehension, asking them to once again engage in the self-efficacy survey, and completing the skill checklist, the students had a week of achievement testing. The Iowa Test of Basic Skills was administered during the month of March, 2002. Although the study continued to be implemented in the classroom during that said week, weeks 8 and 9 were not in a consecutive order.

Site C

The first two weeks of the Action Plan were spent in gathering and calculating data from the first grade students. The reading comprehension pre-test and a reading survey were administered. The instructor, using the reading checklist, interviewed each child. The results were tabulated and graphed as a baseline analysis.

Simple oral discussions of book titles, authors and illustrators began the implementation of the Action Plan in this first grade. The strategy of a picture walk to stress the importance of using illustrations as a tool in reading was modeled using a teacher think aloud. The instructor used a group graphic organizer to record the class predictions after the picture walks. The predictions were saved for post reading confirmation. These important beginning strategies were modeled across the curriculum with the intent of the student internalizing the approaches.

When the students consistently demonstrated the ability to identify book titles, authors, illustrators and predict story ideas, the instructor introduced the concept of questioning techniques. Again a simple version of Raphael's four types of questions was demonstrated and modeled. One type of question was introduced at a time ranging from literal questions that could be found in the story to higher-level questions that required analyzing, synthesizing and evaluating to answer. These questions were categorized as skinny (literal) and fat (higher order).

The introduction of graphic organizers continued from a simple chart for predictions to a Venn diagram. The use of the Venn diagram was modeled to stress comparing as a means of comprehension. This vital primary thinking skill was taught and modeled repeatedly in a variety of areas. Characters, settings and problems were compared from story to story. The graphic organizer was permanently displayed during the execution of the Action Plan. The main idea web organizer and the sequence flow chart were introduced in a group format. Both were discussed for understanding of purpose and modeled continually until the students were able to use them. The learners completed the organizers either using words or illustrations.

The concept of internalizing the self-questioning techniques for evaluation was introduced, modeled again using a teacher think aloud strategy. Using these strategies to improve reading comprehension and monitor thinking was stressed. The instructor also focused on how successful readers used these methods constantly and with precision. While some of the students were able to

comprehend this idea of remediation, it was necessary to continually model and review this concept.

The final weeks of the study was spent in reevaluation. The reading survey and reading comprehension post-test was administered to students. The teacher individually completed a reading checklist on each learner. The results were tabulated and graphed.

Site D

Week 1 of the action research was used to gather data on the students in this third grade classroom. The instructor administered reading comprehension pre-tests, and self-appraisals to determine the students view of themselves as readers. One-on-one interviews were also conducted to determine the reading strategies the students already possessed and applied while reading. Week 2 was spent in tabulating and analyzing the results of the assessments.

Since the idea of identifying title, author, illustrator was an accomplished task in this classroom, after quickly reviewing the importance of these concepts the instructor moved on to predicting through a picture walk. This concept also had been a familiar strategy to the students so only review of the process was needed.

The idea of posing literal and critical thinking questions had also been presented prior to the action research project using the basal. The teacher, using the question classification visual aid, classified and modeled one category from each group of Raphael's four question categories as a review of this strategy. Using the think-aloud methodology the instructor analyzed how and why the

questions were placed in the categories. This review and think-aloud method was used daily so the students could internalize this comprehension tool. These strategies were stressed across the curriculum in both fiction and factual information.

The use of graphic organizers was introduced using the same methods of teaching and modeling both form and use. The Venn diagram, sequence flow chart and main idea web were used initially as a group project. Eventually the students were able to use them independently after short explanation or review.

The final components of the plan for improving reading comprehension, evaluation of predicting, question classification and thinking processes, were explained and modeled. Using the remediation strategies during problematic reading required much teaching and think-aloud modeling. Students were expected to think about the story from a personal favorite perspective (part, character, etc.). They were also taught to express any lesson learned from reading the story and any personal similarity/difference in characters and themselves they discovered. As these strategies were difficult for the students to internalize, the instructor spent much time on re-teaching and modeling. As with all the reading strategies and skills used in this project, teaching, modeling think-aloud methodology, coaching and practicing were used on a daily basis. The goal was to move the responsibility from the instructor to the students for internalizing these strategies.

The final two weeks of the project were spent in re-testing and evaluating acquired skills. The reading comprehension post-test, reading survey and reading

checklists were administered to each student. The final results were tabulated and

graphed.

Presentation and Analysis of Results

In order to determine if reading comprehension improved at Site A, B, C

and D, teacher observation checklists, reading comprehension tests and student

surveys were completed by the researchers and the students involved in the

project. This data is presented in the following graphs and charts.

Table 6

Teacher Observation Checklist-Site A

	Pre-Data	Post-Data
1.) Recognize letters		
-Frequently	25	26
-Sometimes	5	3
-Not yet	0	1
2.) Identify sound/letter relationship		
-Frequently	25	25
-Sometimes	5	5
-Not yet	0	0
3.) Apply decoding/word attack skills		
-Frequently	4	24
-Sometimes	23	5
-Not yet	3	1
4.) Read for understanding		
-Frequently	6	21
-Sometimes	18	9
-Not yet	6	0
5.) Read a variety of texts independently		
-Frequently	7	21
-Sometimes	21	7
-Not yet	2	2

At Site A, 26 of the 30 students were in the frequently recognizes letter category

compared to the pre observation total of 25. There were two fewer students in the

sometimes category, and the not yet category moved from zero to one. In the

identifying sound/letter relationship category, there were no changes from the pre

observation. Twenty more students were observed applying decoding/word attack

skills, five students fell in the sometime category compared to the prior 23

students, and the not yet category decreased by two. The number of students who

frequently understood what was read increased from 6 to 21. The sometimes

category decreased by nine, and the not yet category changed from six students to zero. Fourteen more students reported to frequently independently read a variety of texts, the sometimes category decreased by 15, and the not yet category increased by one in the classroom teacher's post observation.

Table 7

Teacher Observation Checklist-Site B

	Pre-Data	Post-Data
1.) Apply word attack skills		
-Frequently	12	14
-Sometimes	6	2
-Not yet	3	3
2.) Forms questions and predictions		
-Frequently	7	14
-Sometimes	14	3
-Not yet	0	2
3.) Monitors comprehension and remediation		
-Frequently	8	11
-Sometimes	9	6
-Not yet	4	2
4.) Can create visual aids and graphic organizers		
-Frequently	7	14
-Sometimes	9	2
-Not yet	5	3
5.) Interprets a variety of genres		
-Frequently	8	13
-Sometimes	10	3
-Not yet	3	3

At Site B, 14 of the targeted students were frequently able to apply word attack skills compared to the pre observation total of 12. There were four fewer students in the sometimes category, and the not yet category remained at three. Seven more students were observed frequently forming questions and predictions, 11

fewer were in the sometimes category, and the not yet category moved from zero to two. Eleven students were able to monitor comprehension and remediation compared to the prior eight. The sometimes category shifted from 9 to 6 students and the not yet category moved from 4 students to 2. The number of students who could frequently create visual aids and graphic organizers doubled from 7 to 14. The sometimes category decreased from 9 to 2, and the not yet category moved from 5 to 3 students. There was a shift from 8 to 13 students in the frequently interpreting a variety of genres category, a decrease of seven students was reported in the sometimes category, and there was no change in the not yet category.

Table 8

Teacher Observation Checklist-Site C

	Pre-Data	Post-Data
1.) Recognize letters		
-Frequently	19	19
-Sometimes	0	0
-Not yet	0	0
2.) Identify sound/letter relationship		
-Frequently	14	19
-Sometimes	4	0
-Not yet	1	0
3.) Apply decoding/word attack skills		
-Frequently	10	18
-Sometimes	8	1
-Not yet	1	0
4.) Read for understanding		
-Frequently	18	18
-Sometimes	0	1
-Not yet	1	0
5.) Read a variety of texts independently		
-Frequently	13	18
-Sometimes	1	1
-Not yet	5	0

At Site C, 19 of the 19 students were in the frequently recognizes letters category.

None of the students were in the sometimes or not yet categories, which was the

same results in the pre observation total. All of the 19 students were able to

frequently identify sound/letter relationships compared to the researcher's pre

observation. Those showed four students in the sometimes category and one

student in the not yet able to identify sound/letter relationships category. At this

same site, 18 of the 19 students could frequently apply decoding/word attack

skills, which was an increase of eight students. Only one student fell into the

sometimes category, which was a decrease of seven from the pre data, and the not

yet category shifted from one student to zero. Eighteen of the 19 students could

frequently read for understanding and one student move from the not yet category

to sometimes category. Eighteen of the 19 targeted students frequently read a

variety of texts independently, which was an increase of five. The sometimes

category remained at one, and the post observation data showed a shift from five

to zero students in the not yet portion of the checklist.

Table 9

Teacher Observation Checklist-Site D

|	Pre-Data	Post-Data
1.) Apply word attack skills		
-Frequently	7	13
-Sometimes	4	1
-Not yet	3	0
2.) Forms questions and predictions		
-Frequently	5	11
-Sometimes	3	3
-Not yet	6	0
3.) Monitors comprehension and remediation		
-Frequently	5	7
-Sometimes	2	7
-Not yet	7	0
4.) Can create visual aids and graphic organizers		
-Frequently	0	4
-Sometimes	4	10
-Not yet	10	0
5.) Interprets a variety of genres		
-Frequently	0	7
-Sometimes	6	7
-Not yet	8	0

At Site D, 13 students frequently applied word attack skills compared to the former seven, the sometimes category shifted from four to one, and the not yet category shifted from three to zero. The frequently category in forming questions and predictions moved from five to eleven, the sometimes category remained at three, and the not yet category moved from six to zero. Seven students were frequently observed monitoring comprehension and applying remediation strategies, which was an increase of two. The sometimes category went from two to seven, and the not yet category shifted from seven to zero. In the creating visual aids and graphic organizers category, the frequently numbers shifted from zero to four. The sometimes category went from four to ten, and the not yet portion moved from ten to zero. There were no students observed not yet interpreting genres on the post checklist, compared to the prior eight. The sometimes category increase by one to seven, and the frequently category moved from zero to seven students.
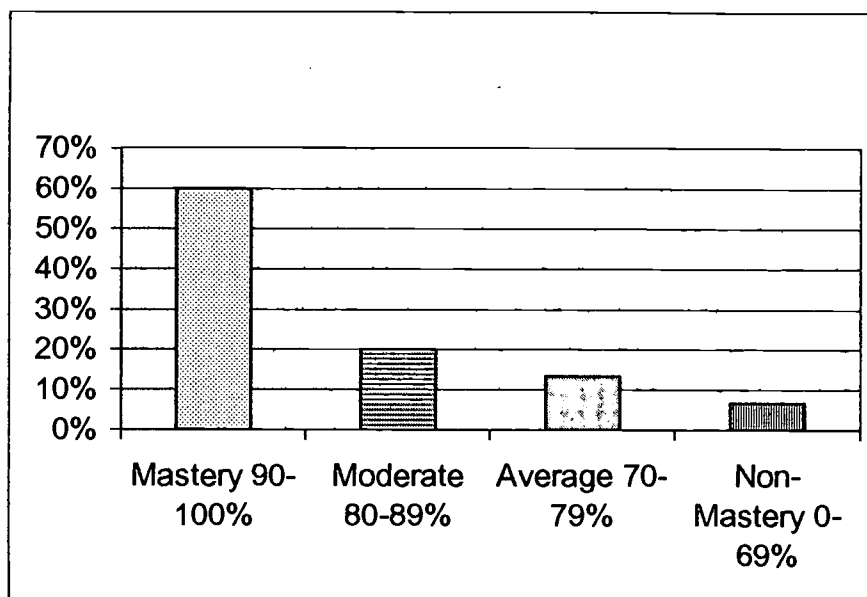
Figure 5 – Site A Reading Test Scores

In the reading comprehension posttest, 60% of the students showed mastery,

which was an increase of 50% from the pretest. Twenty percent of the students

had a moderate understanding of the content, a decrease of 17%, and the average

range category decreased 7%. The non-mastery category shifted from 33% to 7%

in the posttest (See Figure 1).
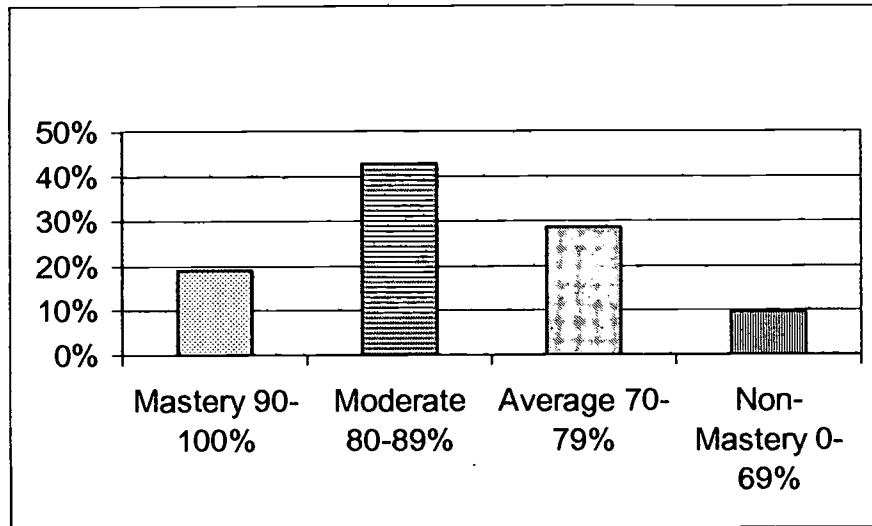
Figure 6 – Site B Reading Test Scores

In the reading comprehension posttest, 19% of the students showed mastery, which was an increase of 14% from the pretest. Forty-three percent of the students had a moderate understanding of the content, a decrease of 9%, and the average range category decreased 5%. The non-mastery shifted from 24% to 10% in the posttest (See Figure 2).
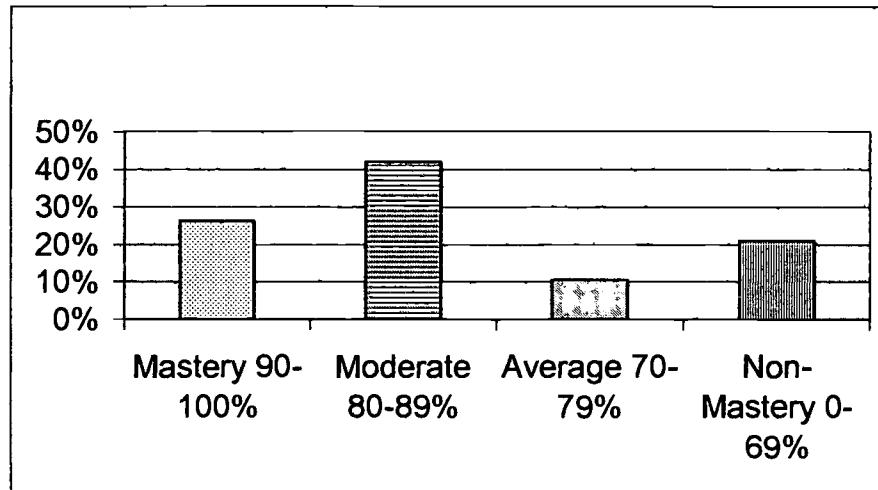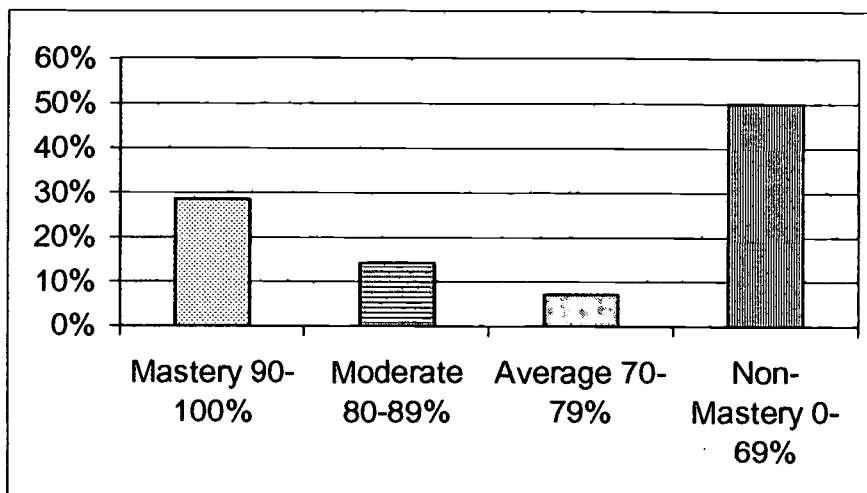
Figure 7 – Site C Reading Test Scores

In the reading comprehension posttest, 26% of the students showed mastery,

which was an increase of 26% from the pretest. Forty-two percent of the students

had a moderate understanding of the content, a decrease of 16% and the average

range category decreased 21%. The non-mastery shifted from 42% to 21% in the

posttest (See Figure 3).

Figure 8 – Site D Reading Test Scores

In the reading comprehension posttest, 29% of the students showed mastery,

which was and increase of 7% from the pretest. Fourteen percent of the students

had a moderate understanding of the content, an increase of 14%, and the average

range category increased 7%. The non-mastery category shifted from 64% to 50%

in the posttest (See Figure 4).

Table 10

Student Reading Survey

	Site A Comfortable	Site A Frustrated	Site B Comfortable	Site B Frustrated	Site C Comfortable	Site C Frustrated	Site D Comfortable	Site D Frustrated
How do you feel about reading at home?	30	0	20	1	19	0	11	3
How do you feel when you read a book at school?	30	0	14	7	18	1	6	8
How do you feel about spending time reading at school?	30	0	16	5	14	5	13	1
How do you feel about reading a new book or story?	30	0	18	3	10	9	10	4
How do you feel about predicting before you read?	30	0	19	2	14	5	8	6
How do you feel when you come to a word you don't know?	27	3	12	9	10	9	3	11
How do you feel when something you read does not make sense?	25	5	9	12	12	7	2	12
How do you feel when you are asked questions about what you have read?	29	1	20	1	16	3	10	4
How do you feel about using a graphic organizer?	30	0	18	3	15	4	7	7
How do you feel about yourself as a reader?	30	0	18	3	18	1	12	2

The reading comprehension intervention appears to have had an overall positive effect on all areas in question. At Sites A, C, and D, the majority of students continued to feel comfortable with their self-perception of themselves as readers. Of a particular note, at Site B more students felt less comfortable reading a book at school and reading a new book or story on the post student survey. At Site A, fewer students reported frustration when decoding unfamiliar words and making sense of their reading. The Site B student post survey shows little frustration with word decoding and comprehension of text when compared to the pre survey. At

Site C, the students were less frustrated with the same areas plus reported

decreased frustration with the questioning process in reading comprehension. Site

C data showed extreme frustration with the decoding and comprehension in the

beginning, but this dramatically decreased in the post survey results. At Site D,

there was a increase of students who felt more comfortable reading in the

classroom and felt more comfortable with themselves as a reader (See Table 5).

Conclusions and Recommendations

Based on the presentation and analysis of the data on increasing reading

comprehension by applying predicting, monitoring comprehension and

remediation, organizing information and personal response strategies, the students

at all sites showed solid improvements. In analyzing the advances some important

conclusions can be drawn. The children developed more organization in their

thinking as readers and more involvement and interest in their reading. They also

took more personal responsibility for their learning and showed more

internalization of the strategies being taught. The instructors added to the learning

by providing more effective teaching through the instruct, model, coach and

practice paradigm.

While elements of these successes were seen in all the classrooms, specific

advances were observed at each individual site. The researcher at Site A (grade

one) found using graphic organizers contributed to increased reading

comprehension significantly. Using the organizers helped the learners visualize

for recollection and comprehension. Venn diagrams encouraged the students to

compare and contrast information for reading analysis. The main idea web and the

sequence flow charts helped the learners remember story order and organize thinking for better understanding. These abilities carried across the curriculum into social studies, science, and writing. The organizers often became the brainstorming tool for different forms of writing.

The Site C (first grade) researcher determined her students were helped by the internalization of the questioning classification process. Students became more involved in the story when they first learned to answer and then ask themselves questions about the reading. Simple (factual or Skinny) or more complex (higher level or Fat) questions helped the learners deal with their own metacognition processes and eventually their reading comprehension.

Site D's (third grade) researcher also found the question classification strategies to be most beneficial. Rafael's four question categories forced the students to think about the reading more. This involvement in reading helped activated prior knowledge for the students and encouraged personal involvement. This personal involvement created a higher interest level and a better understanding of the information. The questions were used across the curriculum effectively. Another important element in this classroom was the constant and consistent use of graphic organizers. These organizational tools focused and ordered students thoughts and ideas in reading comprehension across the curriculum.

At the final site, B (fifth grade), the researcher determined direct instruction in the teaching of skills to be most advantageous to the learning of her students. Teaching the skills of predicting, classification of questions, and

application of remediation strategies using direct instruction, and then modeling, coaching, and practicing allowed the students to internalize the learning most effectively. As this method of instruction was applied to all subject areas in this self-contained classroom on a daily basis, the students became most proficient. The students were able to improve their reading comprehension and take responsibility for their learning with these internalized skills because of the regular practice.

Reflecting back on the accomplishments of this 12-week plan to improve reading comprehension also shows some of the drawbacks. As with many extensive plans of this nature the researchers may have tried to take on too much. The pace was fast with many expectations. Fortunately, many of the research driven strategies that were employed (picture walk, predictions, author, title and illustrator identification) were familiar to the children and required only review. The remediation strategy component was also challenging for the younger students. The younger learners may not have been developmentally ready to analyze and remediate errors in reading on a consistent basis. The final disadvantage that showed up repeatedly in the instructors' journaling was the additional time the instruction took. In fast paced classrooms were every minute counts even 10 additional minutes must be considered carefully.

Society is always looking for a miracle cure for the problems of education. While no such thing truly exists, this 12-week program of improving reading comprehension was successful. The researchers involved identified a problem in their schools and used current research to devise a plan to help remediate the

predicament. Next, the researchers created a plan of effective strategies to implement a solution to the dilemma. The action research team gathered data on the students before and after executing the remediation plan. Finally, the collected data was scrutinized and assessed to form a conclusion as to the validity of the plan. This successful action plan reaffirms the importance of high teacher expectation, research, planning, executing and analyzing for better learning in the classroom.

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Appendices

Appendix A
Teacher Observation Checklist

Teacher: _____ Class: _____ Date: _____

Ratings:
+ = Frequently
O = Sometimes
-- = Not Yet

Names of Students	Recognize letters	Identify sound/letter relationship	Apply decoding/ word attack skills	Read for understanding	Read a variety of texts independently
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

Appendix B
Teacher Observation Checklist

Teacher: _____ Class: _____ Date: _____

Ratings:
+ = Frequently
O = Sometimes
-- = Not Yet

Names of Students	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Apply word attack skills																				
Forms questions and predictions																				
Monitors comprehension and remediation																				
Can create visual aids using graphic organizers																				
Interprets a variety of genres																				

Appendix C
Reading Survey

Name: _____
Date: _____
Date of Birth: _____
Gender: _____
Grade: _____

	Comfortable	Frustrated
How do you feel about reading at home?		
How do you feel when you read a book at school?		
How do you feel about spending free time reading?		
How do you feel about reading a new book or story?		
How do you feel about predicting before you read?		
How do you feel when you come to a word you don't know?		
How do you feel when something you read does not make sense?		
How do you feel when you are asked questions about what you have read?		
How do you feel about using a graphic organizer?		
How do you feel about yourself as a reader?		

Appendix D
Visual Aid

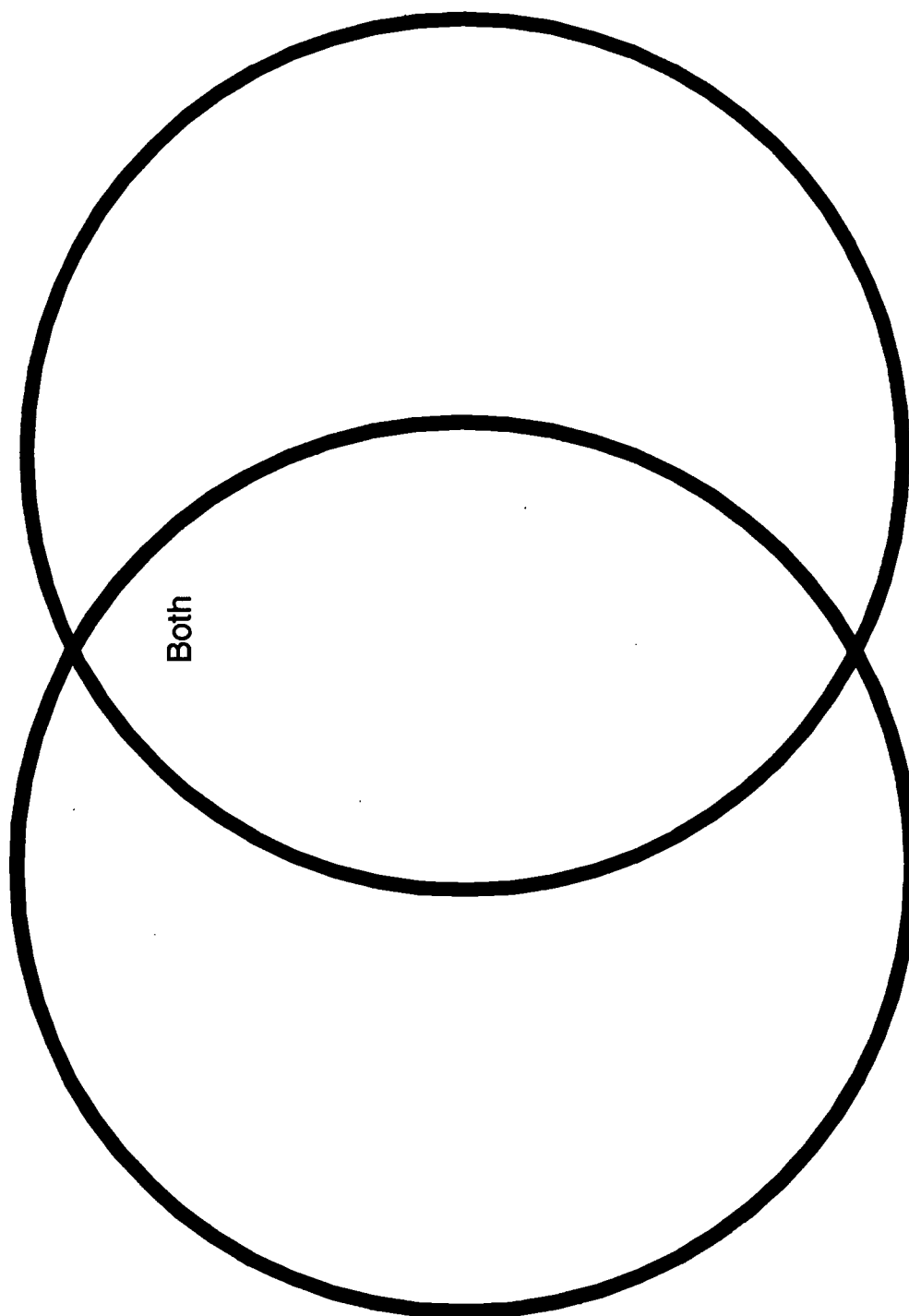# Fat and Skinny Questions

Fat Questions
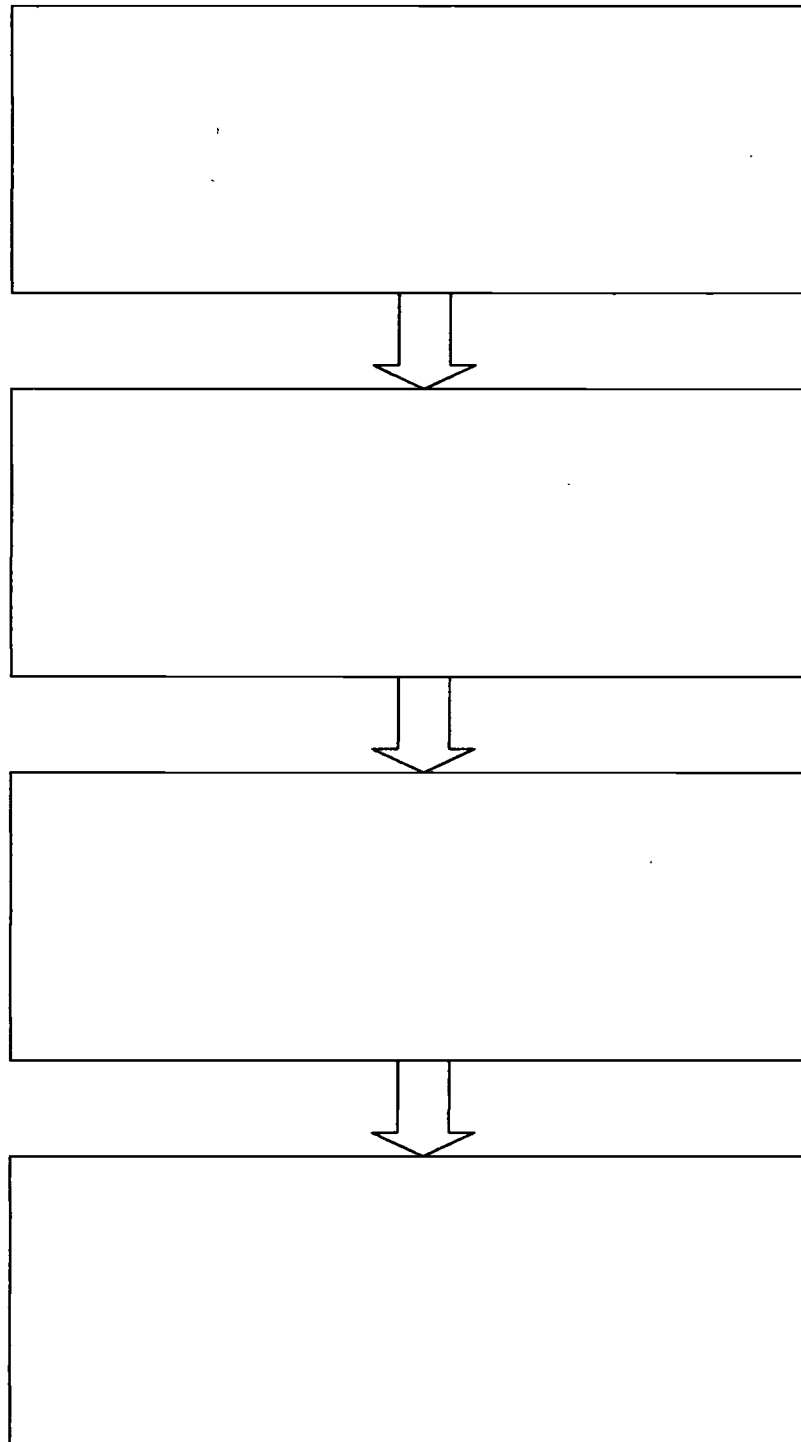➢ Your brain and the story

Skinny Questions
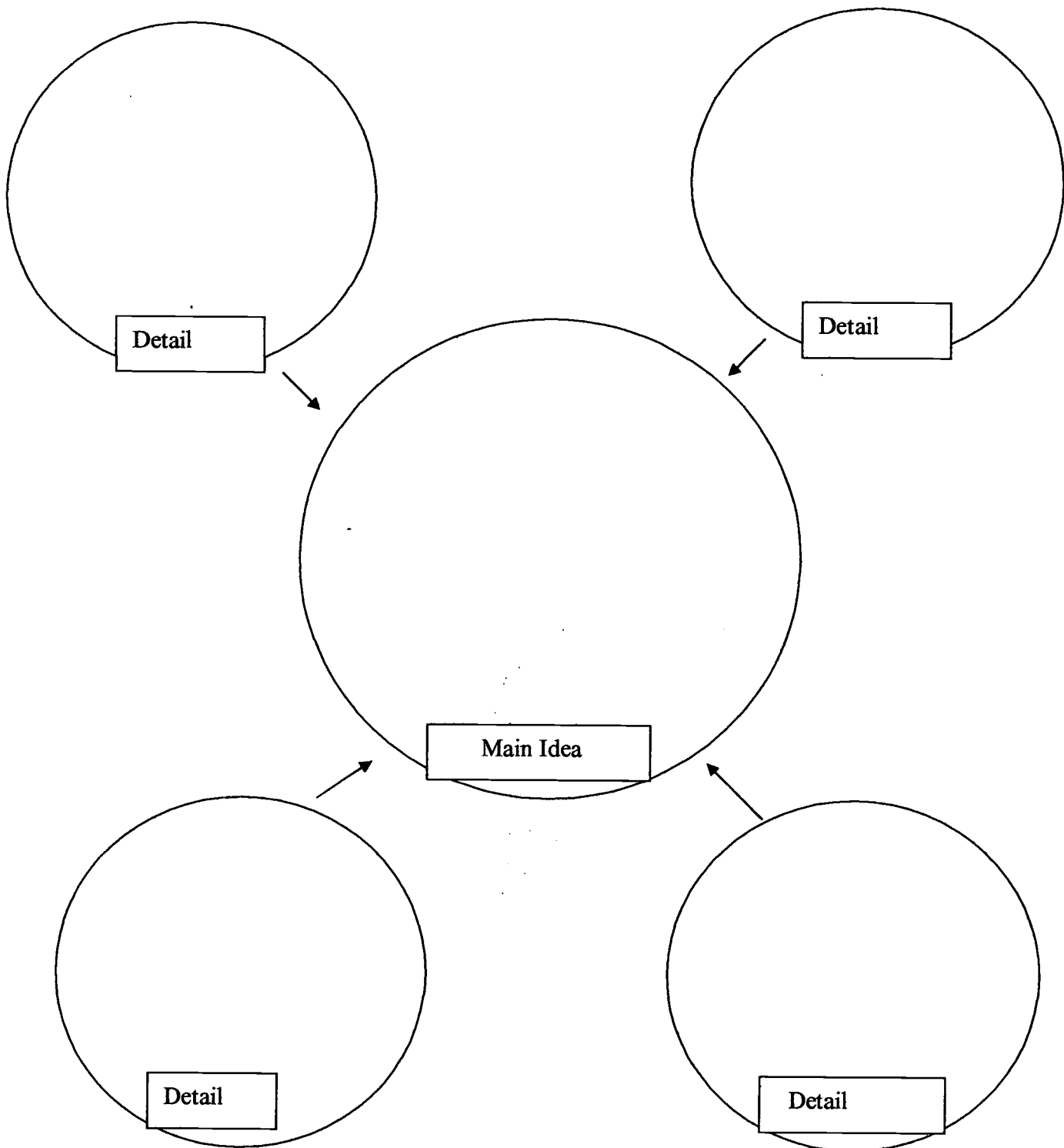➢ Right there in the story
(Page number)

Appendix E
Venn Diagram

Both

Appendix F
Sequence Flow Chart

Appendix G
Main Idea/Detail Web

Detail

Detail

Main Idea

Detail

Detail

Appendix H
Visual Aid

SKINNY QUESTIONS

❖   Right There
The answer is in the story.
❖   Think and Search
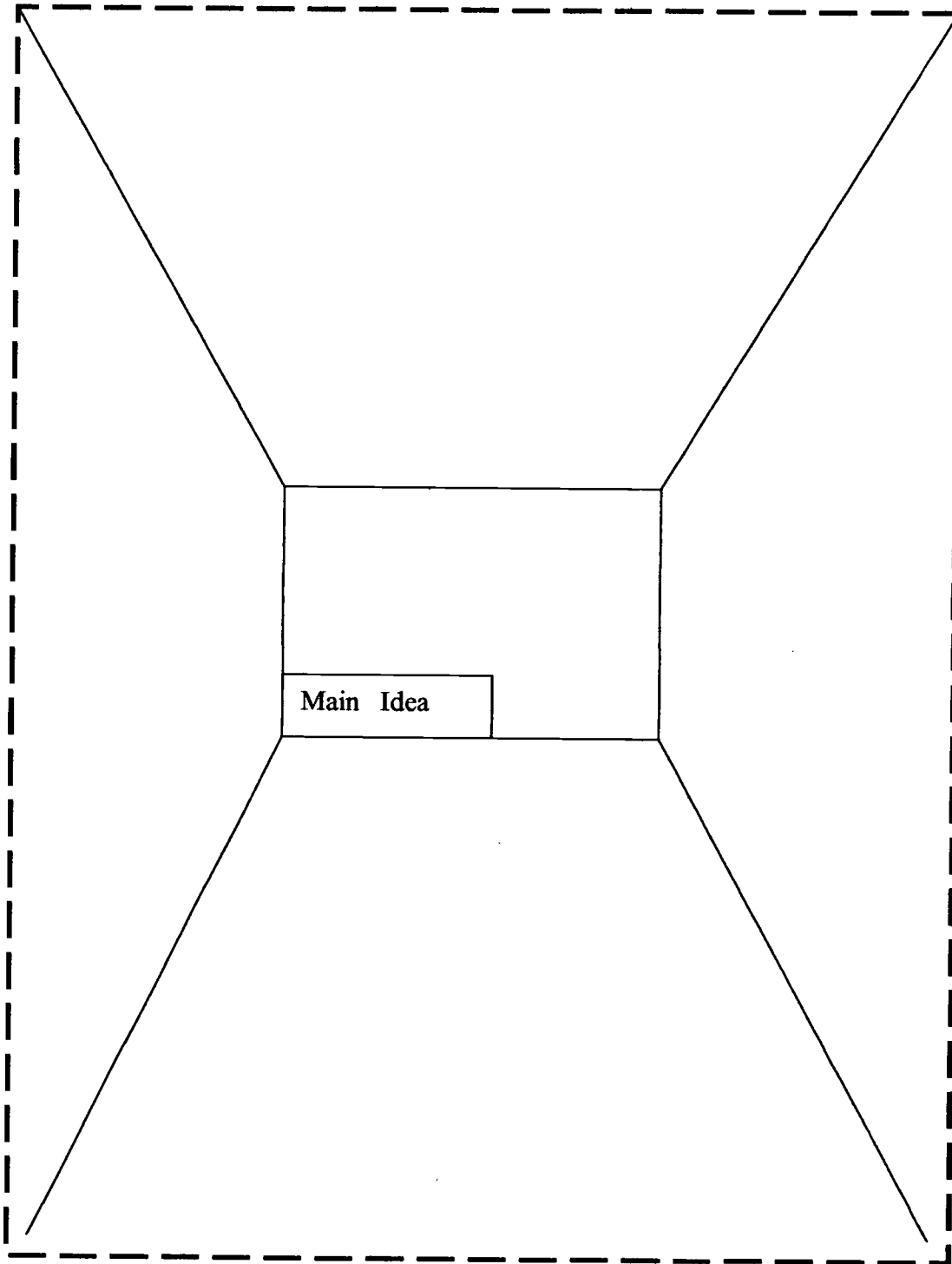You have to look through the
story for the answers.

FAT QUESTIONS

❖   Author and You
Mix what you know (your brain)
and what the author is telling
you for the answer.

❖   On Your Own
The answer to this question is
in your brain.

Appendix I
Main Idea/
Details Web

Main   Idea

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