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ABSTRACT

This report describes a program for increasing student motivation in reading through the use of multiple intelligences. The targeted population consisted of one first grade and two fourth grade classrooms located in two western suburbs of a major metropolitan city. The problem of low student motivation is documented through low performance on reading assessments, teacher observation, self-assessments, class participation, student work samples, and homework. Analysis of probable cause data revealed: (1) diversity of student needs contributed to greater challenges in sustaining student motivation; (2) ineffective supports and interventions for students having difficulty with reading; (3) an emphasis on passive learning rather than active learning; (4) low student self-esteem; (5) students were unaware of their control of their learning, thinking behavior, and motivation. A review of solution strategies suggested altering reading curricula by teaching to the multiple intelligences, implementing student self-assessments, and incorporating student goal setting. Results indicated that the use of integrating multiple intelligences into daily lesson plans increased student motivation in reading, and students developed an appreciation for reading that went beyond the classroom. Appendixes contain: Teacher Questionnaire; Reading Motivation Survey; Developmental Reading Assessment; STAR Reading Test; Teacher Observation Checklist; Weekly Student Self-Assessment in Reading; Running Record; Rubric for Book Reports; Invention Unit; Weekly Reading Goal Sheet; and Parent Newsletter. (Contains 56 references, 4 tables, and 35 figures.) (Author/RS)

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IMPROVING STUDENT MOTIVATION IN READING THROUGH THE USE OF MULTIPLE INTELLIGENCES

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Mina Thielenhouse
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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 Masters of Arts in Teaching and Leadership

Saint Xavier University & SkyLight Professional Development

Field-Based Masters Program

Chicago, Illinois

March, 2001

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Abstract

This report describes a program for increasing student motivation in reading through the use of multiple intelligences. The targeted population consisted of one first grade and two fourth grade classrooms located in two western suburbs of a major metropolitan city. The problem of low student motivation is documented through low performance on reading assessments, teacher observation, self-assessments, class participation, student work samples, and homework.

Analysis of probable cause data revealed: 1) diversity of student needs contributed to greater challenges in sustaining student motivation 2) ineffective supports and interventions for students having difficulty with reading 3) an emphasis on passive learning rather than active learning 4) low student self-esteem 5) students were unaware of their control of their learning, thinking behavior, and motivation.

A review of solution strategies suggested altering reading curricula by teaching to the multiple intelligences, implementing student self-assessments, and incorporating student goal setting.

SIGNATURE PAGE

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CHAPTER 1

PROBLEM STATEMENT AND CONTEXT

General Statement of the Problem

The students in the targeted first and fourth grade classes are not fully engaged and motivated when completing assigned reading tasks. Evidence for the existence of a problem includes teacher observation, reading assessments, self-assessments, class participation, student work samples, and homework.

Immediate Problem Context

This action research study took place at two separate sites. Both sites are located in western suburbs of a major Midwestern city and are elementary schools. The sites include a preschool through eighth grade parochial school and a pre-kindergarten through fifth grade public school. The sites will be designated as Site A and Site B with Classroom 1 and Classroom 2.

School Setting

Site A

Site A is a parochial grade school with preschool through eighth grade students attending. Table 1 describes the racial and ethnic background and total enrollment.

Table 1
Racial/Ethnic Background and Total Enrollment of Targeted Schools

Site	White	Black	Hispanic	Asian/ Pacific Islander	Native American	Total Enrollment
A	91%	1%	3%	4%	0%	239
B	37.1%	2.8%	53.4%	6.4%	0.3%	326

Table 2 describes limited English proficient and low income which both make up 0% of the total population.

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

Site	Low-Income	Limited-English-Proficient
A	0.008%	0.0%
B	5.5%	25.5%

The religious affiliation is as follows: 50% of the students are members of non-Lutheran congregations, 40% are members of the sponsoring Lutheran congregation, 9% are members of other Lutheran congregations, and 1% do not claim any church affiliation. The current tuition rate per year for members is $1815 for one child, and the current tuition rate per year for nonmembers is $2599 for one child. These amounts can be divided into monthly payments paid throughout the school year (School Statistical Report 2000-2001).

The instructional staff consists of ten full-time teachers, a principal, two pastors, a Director of Christian Education, and five part-time teachers, all of whom are White. The instructional staff is 75% female and 25% male. There are also numerous volunteers who assist the staff and students throughout the school year. The average class size for grades kindergarten through eighth is 17 students. Table 3 describes the average teaching experience, degrees held by teachers, and pupil to teacher ratio. The average teacher's salary is $33,845. A blank teacher questionnaire which was used to collect relevant data is found in Appendix A.

Table 3
Teacher Characteristics for Site A and B

Site	Average Teaching Experience	Teachers with Bachelor's Degree	Teachers with Master's and Above	Pupil to Teacher Ratio
A	16 Years	62%	38%	15:1
B	17 Years	63%	37%	27:1

The school was established in 1886. The school and church are both in one building. The building, constructed in 1954, provides classroom space for preschool through eighth grade, a well-stocked library, an Internet access computer lab, a music room, a gymnasium, an eating area/extended care in the church basement, and a church sanctuary which is utilized for chapel worship services. The preschool through fourth grade are self-contained classrooms. Grades fifth through eighth are departmentalized. Each classroom and office is equipped with a telephone for internal and external use.

Each classroom is equipped with one or two computers, and a computer for use in the accelerated reader program. The computer lab is equipped with 10 IBM computers. The offices are equipped with IBM compatible computers. The core curriculum consists of language arts (reading, writing, and spelling), mathematics, science, and social studies. Specials include P.E., art, and music.

Table 4 describes attendance, mobility, and truancy of Site A (Illinois School Report Card, 2000).

Table 4
Attendance, Mobility, and Chronic Truancy for Site A and B

Site	Attendance	Mobility	Chronic Truancy	Number of Chronic Truancy
A	97.5%	2.5%	0.0%	0
B	95.6%	23.9%	0.0%	0

The length of the school day is from 8:00am to 3:30pm for certified faculty and 8:15am to 3:05pm for the student body. Every other Thursday faculty members participate in staff development activities or meetings for one hour. Extra-curricular activities in the athletic program include volleyball, basketball, and track. Other activities are band and strings, handbells, and various student activity committees.

Classroom Setting

The targeted fourth grade class at Site A consists of 18 students in a self-contained classroom. The students are in contact with their homeroom teacher, who is responsible for major instruction, and P.E. teacher daily, their music teacher twice a week, and their library director once a week. Students sit in cooperative groups at desks. The classroom has windows on one wall. The classroom has two computers: one for word processing, and one for Accelerated Reader, which is a computer program that tests students on comprehension of selected literature. The room is located on the second floor between the third grade and fifth grade classrooms.

Community Setting

Site A is located in a suburb of a major metropolitan city. The population of the community in which site A is located is 14,862. The racial distribution of Site A is 90.9% White, 6.4% Black, 2.0% Hispanic, and 0.7% Other. The median age of residents is 38.1 years. The median family income is $95,917. The number of households in the community is 5,259, with the median home price being $305,000. The surrounding community has many large old homes. They are predominantly single family structures. Very few of the students attending Site A live within walking distance of the facility, and therefore, need to be transported to and from

school by parents or guardians, or through the use of a car pool (Local Newspaper Website, 2001).

Site A is one of many parochial schools in the immediate area. The number of families that live outside the school zip code area amount to 69% of the total school enrollment. The average teachers' salary is $33,845 and the administrator's salary is unavailable as it is a parochial school. The per pupil expenditure is $2591. The school is owned and operated by the sponsoring congregation. The day-to-day operation of the school is overseen by the school board. The school board consists of seven members elected by the congregation to serve two year terms. The principal, both pastors, and one other individual from an affiliated congregation serve on the board in advisory roles. The school board chairperson is a member of the church council and serves a three-year term. The church council acts on behalf of the congregation, and must answer to the congregation because the congregation is the ultimate authority.

The school board and faculty both desire the school to become more visible within the community. Our administration has begun to advertise and publicize the school more in local papers. Also, attempts to be involved in activities during the school year with other schools in the area are being made.

School Setting

Site B

Site B is a public grade school with pre-kindergarten through fifth grade attending. Table 1 (as shown on page 2) describes the racial and ethnic background and total enrollment. Table 2 (as shown on page 2) describes limited English proficient and low income students. The

instructional staff consists of 19 full time teachers and a principal, all of whom are White. The instructional staff is 95% female and 5% male. There are also numerous volunteers who assist the staff and students throughout the school year. The average class size for grades kindergarten through fifth is 24. Table 3 (as shown on page 3) describes the average teaching experience, degrees held by teachers, and pupil to teacher ratio. The average teacher's salary is $45,195 (Illinois School Report Card, 2000).

The school was established in 1968. The school is a one-story brick building which is air conditioned and sound proofed due to the nearby airport. It contains 15 classrooms, a gymnasium, and a multimedia resource room, which houses 21 computers with Internet access. Each classroom has one computer with Internet access as well as Accelerated Reader grades second through fifth. Each classroom also contains a telephone. The core curriculum consists of language arts (reading, writing, and spelling), mathematics, science, social studies, and foreign language. Specials includc P.E., art, and music.

Table 4 (as shown on page 3) describes attendance, mobility, and truancy of Site B. The length of the school day is from 7:30am to 3:30pm for certified faculty and 8:15am to 2:50pm for the student body. Every Thursday students are dismissed at 1:55pm and faculty members participate in staff development activities for the remainder of the school day. Extracurricular activities include intramural sports, chorus, and hand chimes. Special programs offered through Site B include Reading Recovery, and a Teacher on Special Assignment to assist primary students in their reading instruction.

Classroom Setting

Site B Classroom 1 is a first grade self-contained classroom. Classroom 1 consists of 26 students. Students sit in cooperative groups at desks. There are two kidney tables in the classroom for guided reading groups and five center areas for work. The classroom has windows on two walls and a wall that opens to an adjoining first-grade classroom. The classroom has a computer with Internet access, a television and VCR, and a sink.

Site B Classroom 2 is a fourth grade self-contained classroom. Classroom 2 consists of 23 students. Students sit in coopcrative groups of three or four at desks. Classroom 2 has windows on one wall. The classroom has one computer with Internet access and is connected to Accelerated Reader. The room is located in a separate intermediate wing of the school with seven other classrooms.

District Setting

The school district has one elementary school for pre-kindergarten through fifth grade, one school for pre-kindergarten through third grade, one school for kindergarten through fifth grade, and another school for fourth and fifth grade. The district also includes a middle school for sixth through eighth grade. The total enrollment for the district is 2,180 students. The average teacher's salary is $45,913, and the administrator's salary is $88,276. Administration consists of one superintendent, one assistant superintendent in charge of business, one assistant superintendent in charge of curriculum, and a director of personnel and public relations. The school board consists of seven members elected by the community every four years (Local Newspaper Website, 2001).

Community Setting

Site B is located in a suburb of a major metropolitan city near a major international airport and a railroad station. The community has a population of 18,009. The racial distribution is 73.7% White, 19% Hispanic, 6.7% Other, and 0.7% Black. The median age of residents is 34 years. The median family income is $59,274. The number of households in the community is 6,748, with the median home price being $152,000. Site B has recently had an influx of four new housing developments within a two mile radius (Local Newspaper Website, 2001).

A referendum has not been passed in the community for 33 years which has lead to limited teacher and curricular resources. A possible solution for the financial difficulties is the tearing down of all the existing elementary schools and relocating students to one newly built central location. The situation has left teachers unsure of future teaching positions and job stability.

Support from the community includes the 'Helping One Student To Succeed' program (H.O.S.T.S.), which allows volunteers from the community to assist students in learning how to read. Residents of Site B have access to a community library, five Head Start Programs, and a park provided by the Park District for extracurricular activities.

National Context of Problem

The National Assessment of Educational Progress (NAEP) issued several reports during the 1970's and 1980's that state "a majority of students are not developing intellectual capacities necessary for democratic citizenship, lifelong learning, and productive employment in the economic system" (Mullis, Owen, and Phillips as cited in Patrick 1991, p. 2). Only five to eight

percent of 17 year olds are able to solve multiple step problems, synthesize data, read analytically and think critically (Patrick, 1991).

In February 1990, a set of six national goals mandated by the U.S. government was prompted to increase student achievement and school improvements by the year 2000. National concerns have been that students have not received an education that prepares them for life in the twenty-first century (Patrick, 1991).

Students of the twenty-first century are varied in their needs now more than ever. Teachers face greater challenges sustaining motivation among students. Edge, et al. state that pressures from teachers placed on students to succeed do not play a part in motivating students. Generally students who are self-motivated achieve academic success (Edge, Martinez, Cuevas, Elder, and Fisher 2001).

Students are unpredictable, and their motivation changes from day to day. A common complaint of teachers is that students are not motivated to learn, have a low interest in school and are not concerned about teacher expectations. "Student motivation is a chronic concern in schools today" (Rinne, 1998, p. 38).

Student motivation and interest tend to diminish based on the types of learning instruction used by the teacher. As students get older, their feelings toward school and school assignments become more negative (Ringness, Drathwohl et al., Mager, and Keller as cited in Main 1993).

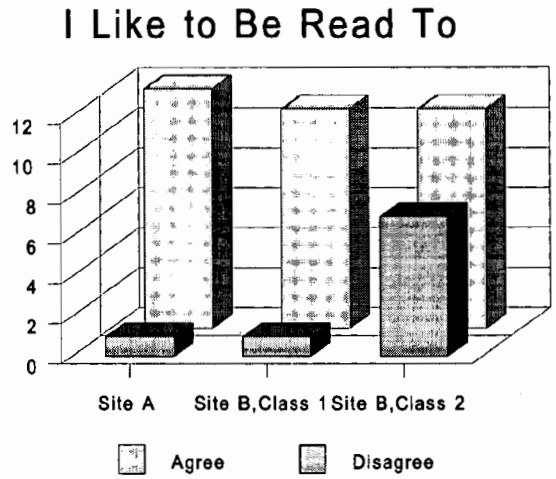
CHAPTER 2

PROBLEM CONTEXT

At the beginning of the school year, the students in each classroom at each site were given a reading motivation survey (Appendix B). There were 13 students at Site A, 12 students at Site B, Classroom 1, and 18 students at Site B, Classroom 2. Directions and statements were presented orally to the students. Then they independently responded to each statement by marking agree or disagree. Responses to each statement from each site and classroom were tabulated and combined into bar graph form as shown in Figures 1-14. Surveys were given in order to evaluate student motivation in reading.

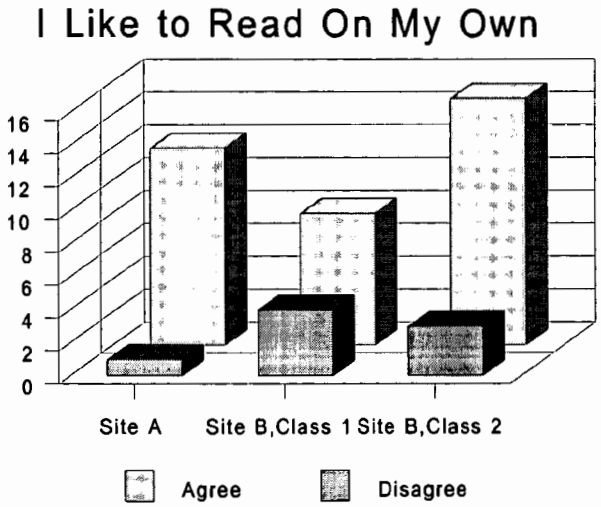
Figure 1 shows that at Site A, 12 students like to be read to, while 1 student does not. At Site B, Classroom 1, 11 students like to be read to, while 1 does not. At Site B, Classroom 2, 11 students like to be read to, while 7 do not. At Site A and Site B, Classroom 1, the majority of students like to be read to. While at Site B, Classroom 2, there was a fairly consistent divide between the number who like to be read to and the number who do not. It is evident that most students do enjoy being read to, although at Site B, Classroom 2, it was clear that 7 students did not enjoy this.

Figure 1



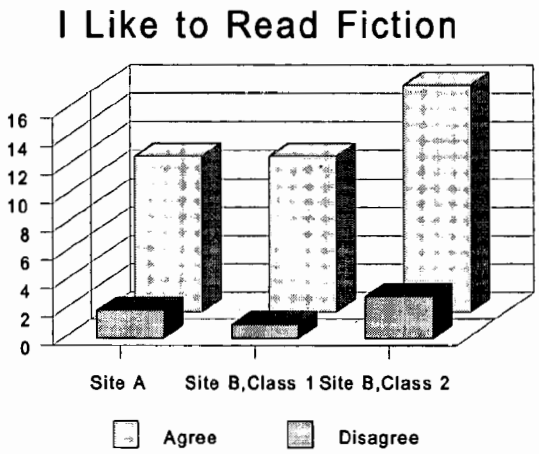
At Site A, 12 students like to read on their own while 1 does not. At Site B, Classroom 1, 8 students like to read on their own while 4 do not. At Site B, Classroom 2, 15 students like to read on their own, while 3 do not. At Site B, Classroom 2, most students clearly like to read on their own, which would explain why in Figure 2, 7 students did not like to be read to.

Figure 2



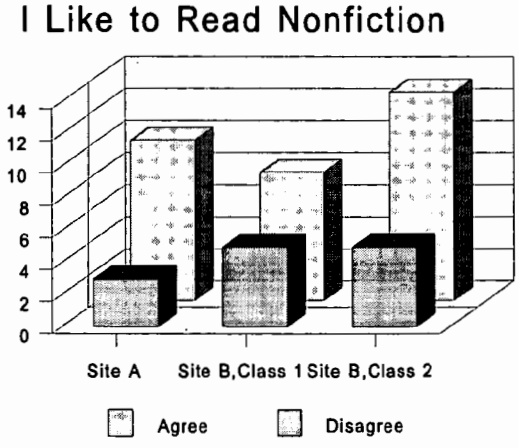
As shown in Figure 3, at Site A, 11 students like to read fiction, while 2 do not. At Site B, Classroom 1, 11 students like to read fiction, while 1 does not. At Site B, Classroom 2, 16 students like to read fiction, while 2 do not. At Site B, Classroom 2, students have a high interest in reading fiction.

Figure 3



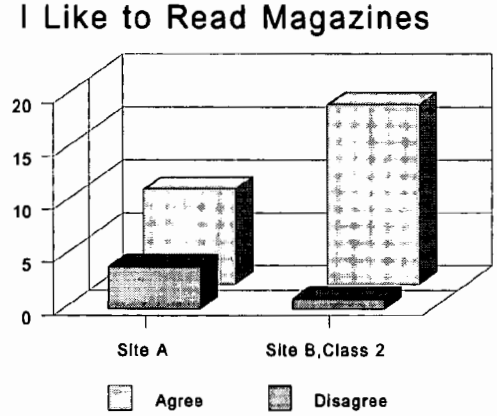
At Site A, 10 students like to read nonfiction, while 3 do not. At Site B, Classroom 1, 8 students like to read nonfiction, while 5 do not. At Site B, Classroom 2, 13 students like to read nonfiction, while 5 do not. It seems that students are somewhat mixed at all three sites about their enjoyment of nonfiction reading as shown in Figure 4.

Figure 4



At Site A, 9 students enjoy reading magazines, while 4 do not. As shown in Figure 5, at Site B, Classroom 2, 17 students enjoy reading magazines, while 1 does not. At Site B, Classroom 2, students clearly enjoy magazines.

Figure 5



At Site A, 7 students like to read comic books, while 6 do not. At Site B, Classroom 2, 12 students like to read comic books, while 6 do not. It appears at both sites, comic books are a true passion for some, while others have no interest as shown in Figure 6.

Figure 6

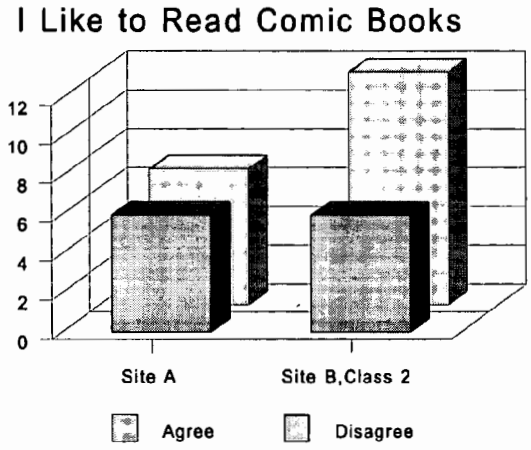
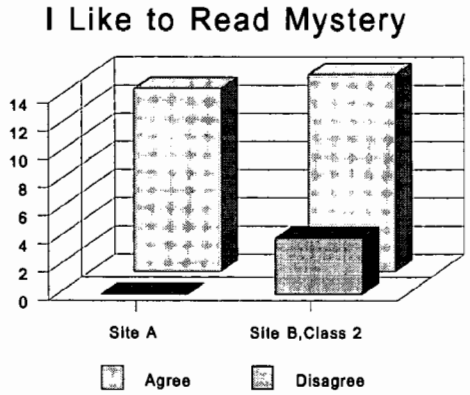


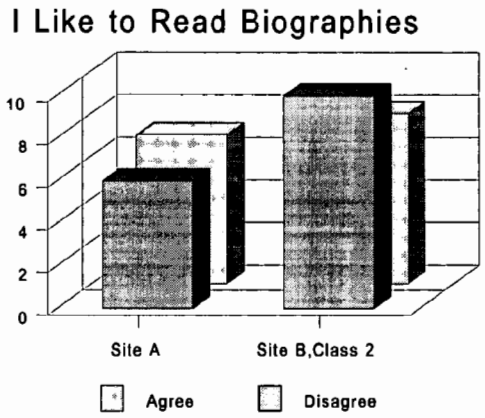
Figure 7 shows that at Site A, all 13 students like to read mysteries. At Site B, Classroom 2, 14 students like to read mysteries, while 4 do not. At both sites, the majority of the students enjoy reading mysteries and have a high interest in this genre.

Figure 7



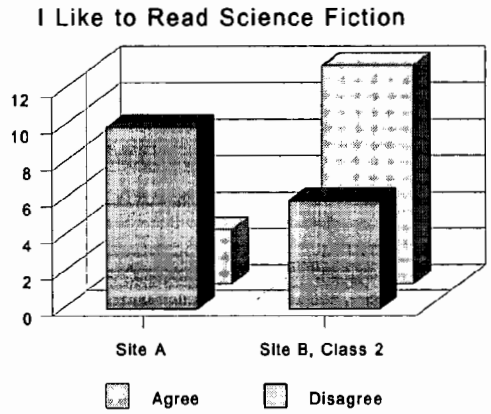
At Site A, 7 students like to read biographies, while 6 do not. At Site B, Classroom 2, 8 students like to read biographies, while 10 do not. At Site B, Classroom 2, more students did not like biographies because of a possible lack of exposure to this genre as shown in Figure 8.

Figure 8



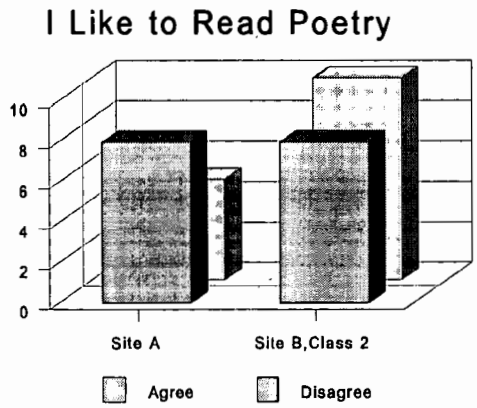
As shown in Figure 9, at Site A, 3 students like to read science fiction, while 10 do not. At Site B, Classroom 2, 12 students like to read science fiction, while 6 do not. Students at Site A didn't seem to like to read science fiction.

Figure 9



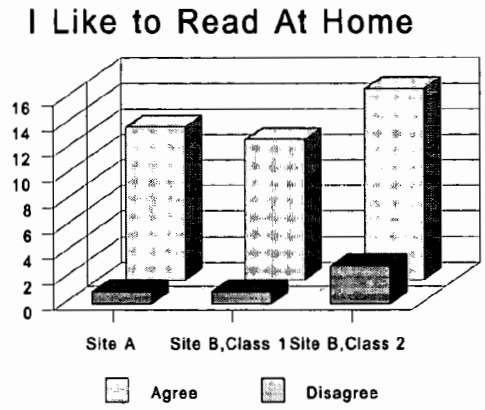
At Site A, 5 students like to read poetry, while 8 do not. At Site B, Classroom 2, 10 students like to read poetry, while 8 do not. It is evident at both sites that poetry is not a popular choice as shown in Figure 10.

Figure 10



At Site A, 12 students like to read at home, while 1 does not. As shown in Figure 11, at Site B, Classroom 1, 11 students like to read at home, while 1 does not. At Site B, Classroom 2, 15 students like to read at home, while 3 do not. Consistently at both sites, students enjoy reading at home.

Figure 11



At Site A, 10 students like to read at school, while 3 do not. At Site B, Classroom 1, 6 students like to read at school, while 6 do not. At Site B, Classroom 2, 15 students like to read at school, while 3 do not. At Site A and Site B, Classroom 2, the majority of the students like to read at school as shown in Figure 12.

Figure 12

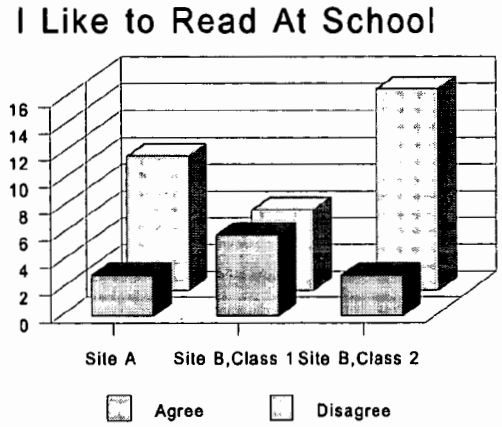
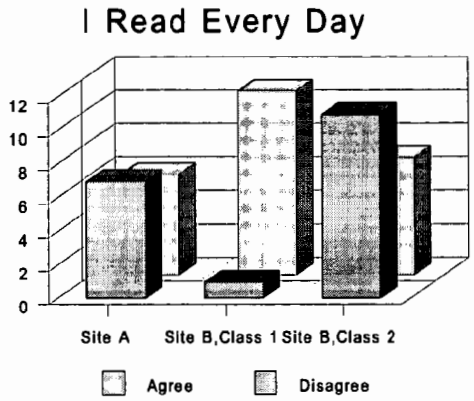


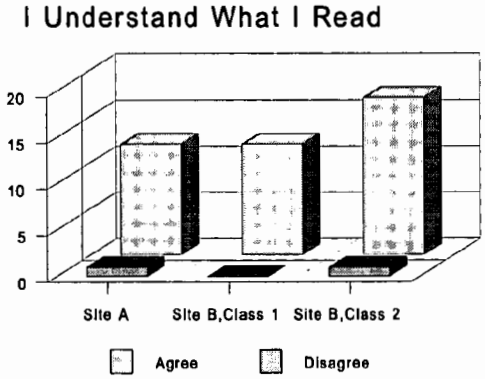
Figure 13 shows that at Site A, 6 students read every day, while 7 do not. At Site B, Classroom 1, 11 students read every day, while 1 does not. At Site B, Classroom 2, 7 students read every day, while 11 do not. At Site B, Classroom 2, the majority of the students do not read every day.

Figure 13



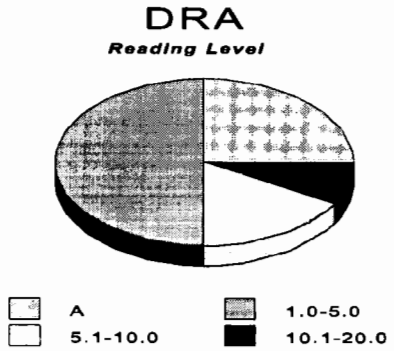
At Site A, 12 students understand what they are reading, while 1 does not. At Site B, Classroom 1, all 12 students understand what they are reading. At Site B, Classroom 2, 17 students understand what they are reading, while 1 does not. Students understand what they are reading consistently at all three sites as shown in Figure 14.

Figure 14



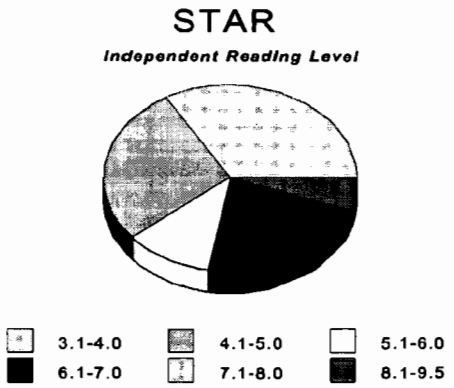
In May 2001 at the end of kindergarten, students at Site B, Classroom 1 were given the Developmental Reading Assessment (DRA). The information was tabulated and grouped and put into circle graph form, as shown in Figure 15, to show the reading levels of the class. The DRA was given in order to establish preliminary reading levels. A sample report is found in Appendix C.

Figure 15



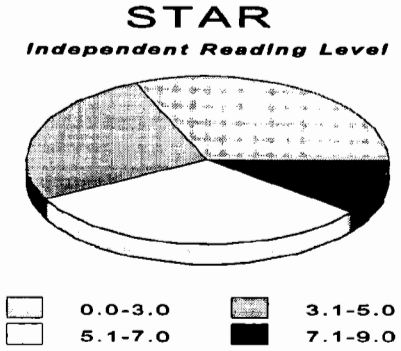
In May 2001 at the end of third grade students at Site B, Classroom 2 were given the Standardized Test for Assessment of Reading (STAR). The information was tabulated and groupcd and put into circle graph form, as shown in Figure 16, to show the reading levels of the class. The STAR was given in order to establish preliminary reading levels. A sample report is found in Appendix D.

Figure 16



In September 2001 students at Site A were given the STAR. The information was tabulated and grouped and put into circle graph form, as shown in Figure 17, to show the reading levels of the class. The STAR was given in order to establish preliminary reading levels.

Figure 17



THE PROBABLE CAUSE

Literature Review

There are numerous factors that contribute to lack of student motivation in relation to reading in the classroom. Contributing factors include diversity of student needs, passive learning rather than active learning, low self-esteem, and lack of metacognition. "Motivation to learn is characterized by long-term quality involvement in learning and commitment to the process of learning" (Ames, 1990, p. 2). If students are confronted with any one of these challenges, this becomes a road block to the learning process.

Diversity of student needs contributes to greater challenges in sustaining student motivation.

Too often it is assumed that all students are the same, regardless of color, socioeconomic status, and learning styles. The curriculum often is not a formula for unity but instead

encourages division and resistance of learners. Teachers and students are thrown into diversity with labels including: learning disabled, behavioral disorder, at-risk, underachievers, etc. (Muir, 2000).

Teachers need to pay attention to the cultural, physical, social, and emotional life of a child, and their academic life. Each reader brings with them different experiences. They have a different repertoire: beliefs, values, ways of understanding (Hebb, 2000). Often teachers cannot even identify individual learning styles (Muir, 2000).

Everyone learns differently and has individual needs. Students bring varied personal and reading experiences with them to reading situations. Students have different ways of understanding text structures, as well as comprehension and organizational skills based on prior knowledge and experiences. All of these skills are used to make sense of texts.

Students in America come from diverse family situations, income strata, and cultural backgrounds. Therefore, America's schools have added challenges in their quest to provide equal educational opportunities to all children. There are many factors that influence the educational opportunities of a student. Such factors include family income, family structure, and parents' education: One out of eight babies is born to a teenage mother, one out of four to a mother with less than a high school education, one out of three to a mother who lives in poverty, and one out of four to an unmarried mother. These factors have been associated with students who have been retained, require special education services, and have been suspended or drop out of school (Young, 1996).

"Changes over time in the composition of students in terms of factors such as student English language proficiency, family income, parents' education, and family structure affect the social context of education" (Young, Pinkerton, Smith, 1996, p. 1). Various educational

outcomes and levels of educational access are connected with social background factors such as family income and structure, parental education, race/ethnicity, and limited English proficiency. "...heterogeneity of student ability levels and preparation for school may create increased challenges for schools to meet the needs of students from different social backgrounds" (Young, Pinkerton, Smith, 1996, p.2).

Low enrollment rates in early childhood education programs are associated with poverty. Children in single parent families experience more early school problems and do not participate in early literacy activities than children in two parent families. Parents' level of education is strongly associated with student academic achievement. More frequently, students who speak another language other than English, face great problems and challenges throughout school. Students with low English proficiency drop out of school. "The social context in which schools operate can influence their effectiveness. Changes in social context present challenges that schools must address to enhance their effectiveness and ensure that education progress can occur" (Young, Pinkerton, Smith, 1996, p.18).

Many minority students become disillusioned when they realize that their home language and community culture are not valued by teachers or schools. They end up "rejecting the world of the school which seems to have so little relevance to their real lives" (Lily Wong Fillmore as cited in Sautter, 2001, p. 4).

Rosalinda B. Barrera (as cited in Sauter, 2001, p.4) states that schools continually overlook learning resources in poor and minority students' lives. "We need to mine the gold of the communities in which students live. . . . It is time for us to bring those cultural treasures into the classroom to benefit our children." We need to explore, develop, build on, and challenge the strengths and interests of today's kids.

A huge percentage of public school students come from culturally and linguistically diverse backgrounds. Students are unmotivated and passive in their learning when they cannot draw upon their own experiences and celebrate their heritages and cultures (Warger, 2000).

Teachers, administrators, and school counselors need to learn new methods and skills for understanding, motivating, teaching, and empowering the rapidly changing student body. "We are a nation of diverse populations and groups. The future of our society depends upon our ability to effectively talk with one another, to reach mutual understanding, and to realize that in diversity there is strength" (Wittmer, 1992, p. 1).

"Students of the twenty-first century are more diverse in their needs than at any time in the history of public education" (Edge, Martinez, Cuevas, Elder, and Fisher, 2001, p. 2). As a result, teachers and administrators face big challenges in maintaining student motivation. Students are unmotivated by the pressure of high expectations from teachers. Students' academic success is traced to their motivation to succeed.

> Motivating the individuals that make up our school systems is not an easy task. Every individual encompassing our education system has his or her own identity and that is why various motivational strategies must be incorporated. Administrators, teachers, and students must be encouraged to work for their own purposes for our schools to succeed (Edge, et al, 2001, p. 4).

Howard Gardner states that "people are different and have different minds." Therefore teachers must build on the diverse strengths of their students to help increase self-esteem and relevancy to students' lives (Gardner, 1994). There are specific differences in how humans approach learning: decision-making, perceptions, and active and reflective engagement in

interactions. Multiple Intelligences respects and celebrates diversity and provides teachers the tools needed to meet high standards (Silver, Strong, and Perini, 1997).

> Knowing that a relationship exists between cultures and education is a prerequisite to effective teaching, but continuing to teach with styles and strategies appropriate only for middle-class Anglo learners fails to meet the needs of culturally diverse children and adolescents (Baruth and Manning, as cited in Reiff, 1997, p. 301)

Teaching strategies must be more culturally responsive to address the high drop out rates and low academic achievement of young students. Teachers' middle-class, Anglo American perspective and expectation of their students are "culturally assaultive" to children and have a negative affect on their academic progress and success. Culture significantly influences what is of value for every individual. Yet schools rarely build on students' strengths, intelligences, and cultural backgrounds. "When a student's cultural style differs from the school culture, cultural incompatibility, or dissonance, often occurs." It is evident that a relationship exists between multiple intelligences and culture, and education should reflect the knowledge and comprehension of each student's culture (Reiff, 1997).

"...every student is different and learns at varying rates, according to his or her abilities." Teachers need to present information in a variety of ways in order to meet the needs of diverse learners (Palardy, 1997, p. 116).

"In the next century, American schools will face an unprecedented challenge: to educate the world's most linguistically diverse student body . . . " (Berman, Minicucci, McLaughlin, Nelson, Woodworth, 1995, p. 1). In the past 10 years, the need for Limited English Proficiency (LEP) services has grown significantly. 1990 U.S. census figures state one million children between five and seven do not speak English or do not speak English well. "Demographic

projections indicate that this diversity will continue" (Berman, Minicucci, McLaughlin, Nelson, Woodworth, 1995, p. 2). At least 1000 school districts in the U.S. serve eight different language groups. More than 40% of schools serve at least four different language groups for enrolled LEP students. "According to 1990 census data (GAO, 1994), almost half of LEP students are immigrants and about 40% are poor" (Berman, Minicucci, McLaughlin, Nelson, Woodworth, 1995, p. 2). LEP students are more likely to get lower grades, drop out of school, and not attend college. LEP students risk falling behind in upper grades if they do not progress beyond the basics taught in early elementary school. LEP students face great challenges in learning a new language: textbooks that do not reflect or represent their culture or people, teachers with low expectations of them, racism in the school, a peer group that "disdains" academic growth and success, and parents who are intimidated by the school and surrounded by poverty (Berman, 1995). The rate of increase in teachers with skills necessary to teach LEP students is smaller than the rate of increase in LEP students.

"The student population in U.S. schools is now more diverse - both culturally and linguistically - than it has been at any time since the early decades of this century" (http://www.ed.gov/pubs/SER/Diversity/summlit.html, 2001, p.1). Many classrooms have at-risk learners, yet many schools do not provide instructional activities that are planned and supported by both classroom teachers and learning center staff. More than 1/5 of the school-age children comes from language minority families (according to 1990 U.S. census). Linguistic diversity among students will persist and grow (Nelson, as cited in Sanacore, 1997).

An emphasis on passive rather than active learning

Students prefer hands-on learning such as projects and activities versus book work. However, this does not mean teachers should do away with content, valid review, and traditional testing methods (Muir, 2000).

"Students across the educational spectrum understand studied material better, retain it longer, and enjoy their classes most when they learn actively rather than passively" (McKeachie et al, 1987; Bonwell, 1995 as cited in Shenker, Goss, and Bernstein, 1996, p. 1). Active learners do things and reflect on what they are doing rather than being shown and hearing about it. Students become participants rather than observers (Shenker et al, 1996).

> Learning is not a spectator sport. Students do not learn much just by sitting in class listening to teachers, memorizing prepackaged assignments, and spitting out answers. They must talk about what they are learning, write about it, relate it to past experiences, apply it to their lives. They must make what they learn part of themselves (Chickering and Gamson, 1987 as cited in Shenker et al, 1996, p. 1 - 2).

Passive learning is easier on the teacher than is active learning. In a classroom using passive learning all activities and discussions are controlled by the teacher. Students are not given enough time to stop and reflect on their learning. There is not as much preparation with passive learning. A teacher also has an easier time covering all the "necessary" material during a school year. With active learning, not all the material can be covered. Therefore, it is much more challenging and takes a greater effort on the part of the teacher to engage students in active learning (Shenker et al, 1996).

Low student self-esteem

Research has shown that there is a direct correlation between self-esteem and low academic achievement. This connection was shown through academic achievement tests and the Coopersmith Inventory used to measure self-esteem. One cause to the problem was directly related to teacher attitudes (Fox and Peck) 1978 (as stated in http://www.ulm.edu/education/hhp/417sp2kacademics.html, 2001, p. 1). Teachers with negative attitudes affected the self-esteem of their students. This in turn had a negative impact on the student's grades. Teachers with personalities in which they were "too" happy affected students with normal self-esteem (http://www.ulm.edu/education/hhp/4175p2academics.html, 2001).

Although experts do not always agree on an exact definition of "self-esteem," they do agree there is a definite connection between how we value ourselves and the amount of confidence we have in our abilities. "Our self-esteem plays a significant role in our social, emotional, and physical well-being. The value we attribute to ourselves has a major impact on our social relationships, on our confidence in our ability to set goals for ourselves and to achieve them, and our ability to resist pressures which may lead to health-risking behaviors" (http://www.sasked.gov.sk.ca/docs/health/health1-5/grad42.html, 2001).

Students have low esteem when they compare themselves in a negative way with their peers, media personalities, and expectations from school and family. Negative attitudes prevent students from reaching their potential. These same students tend to have poor leadership skills, leading to uncomfortable social situations (http://www.sasked.gov.sk.ca/docs/health/health1-5/grad42.html, 2001).

Students with low self-esteem tend to not value their uniqueness, acknowledge their diversity, and are not proud of themselves. Often they do not recognize their strengths and

weaknesses, admit limitations, or acknowledge sources which have a negative influence (http://www.sasked.gov.sk.ca/docs/health/health1-5/grad42.html, 2001).

Student motivation is related to self-efficacy, one's own beliefs in their own ability in completing tasks. Often, poor self-esteem creates emotions such as worry and defensiveness. Students that do not understand that they have control over their academic standing are not excited about the learning process (Mushinski-Fulk, Montgomery-Grymes, 1994).

"Low-achieving children often have low self-esteem, which makes the development of basic metacognitive skills and achievements in school less likely" (Palincsar and Klenk, as cited in Saint-Laurent, Hebert, Royer, Desbiens, 1997, p. 29). Reluctant readers typically have experienced failure in school. At one point in time, they probably have been told advertently or inadvertently that they are poor readers. As a result, feelings of frustration and inadequacy lead to low self-esteem (Hebb, 2000). After failing at a task, students don't feel as competent and confident. "Less successful students lose their intrinsic motivations for reading due to their eroding sense of competence." Often teachers emphasize the high achievers rather than performance of all students. Self worth deteriorates, and students believe there is little hope for change and lack desire (Martino, 1993).

Students tend to do nothing and go nowhere when they are afraid or unsure of where they are going. Their goals are nonexistent or illogical (Martino, 1993). Frequently students show no interest in goal setting because they have had few successful experiences and fear repeated failure, or do not see sufficient recognition or reward at the end (Martino, 1993).

If students doubt their ability to achieve a goal, they would rather protect their ego than risk failure in achieving a goal. Students are unwilling to set and attain goals due to loss of self-confidence and a low self-image (Martino, 1993).

Readers that are reluctant often:

1. Experienced failure in school.
2. Have been told directly or indirectly about being a poor reader.
3. Are frustrated, confused and, ashamed (Hebb, 2000).

Steps to understand why they are reluctant readers:

1. Build self-esteem, confidence, and sense of achievement.
2. Establish a safe environment.
3. Encourage a collaborative setting (Hebb, 2000).

When students do not view themselves as competent, too often they do not participate in challenging activities. This feeling of incompetence affects how students handle new learning situations (Kidsource, 1997).

Students are unaware of how they control their learning, thinking, behavior, and motivation.

Many students feel frustrated. Students know they have to do well and get good grades, but when they cannot make a real world connection, what was learned becomes forgotten. Often what is taught is not what kids are interested in or feel is important (Muir, 2000).

Unmotivated learners fail to monitor their own performance. They do not think they have control over their thinking, learning, and motivation.

Teachers cannot instill motivation within their students. However, teachers can establish classroom environments that enhance students' natural desire to learn. In such environments, students can become aware of the control they have over their own learning, thinking, and motivation (Kidsource, 1997).

Readers that are reluctant often experience failure in school because their individual needs have not been met. They have repeatedly been given a signal they are poor readers, and

are reluctant to take an active role in their learning. Feelings of inadequacy and the inability to self reflect for the purpose of monitoring individual learning processes and self growth have caused students to be less motivated in reading.

CHAPTER 3

THE SOLUTION STRATEGY

Literature Review

Solutions for students who lack motivation in reading include incorporating multiple intelligences into the curriculum, student self-assessment and reflection, student choice, and student goal-setting. Research has shown that students' lack of motivation is a result of repeated failure throughout school and messages that they are poor readers given by other people. As a result, students feel frustrated, inadequate, confused, ashamed, reluctant, and unmotivated (Hebb, 2000). Children need the opportunity for varied instructional methods, choices in their learning, and self-reflection pertaining to outcomes and goals.

Multiple Intelligences

It is essential for teachers to broaden the school curriculum and the method by which it is taught in order for all students to learn, and to reach their highest potential. One way to achieve this goal is to use the multiple intelligences theory developed by Howard Gardner. According to Gardner (1994, p. 581), "MI caters to the fact that people are different and have different minds. It builds on one's strengths and helps to achieve self-esteem and accomplish meaningful school and world things." Gardner believes that all people possess numerous capacities that enable them to create and problem solve (White, Blythe, Gardner, 1992). Gardner (1994, p. 583) shares

with us "that MI theory constitutes precisely the kind of flexible but powerful entry point to the changes that all agree are needed in American educational circles."

The eight different multiple intelligences developed by Gardner are explained as follows:

- Verbal/Linguistic

  Use language well to communicate

- Musical/Rhythmic

  Have various musical abilities

- Logical/Mathematical

  Deal with the abstract and reason things out.

- Visual/Spatial

  Can bring to or take from graphic representation

- Bodily/Kinesthetic

  Can control and coordinate one's body and other objects well

- Naturalist

  Enjoys studying nature and being out in natural environments

- Intrapersonal

  Understanding self through feelings and emotions

- Interpersonal

  Can effectively work and communicate with those around them

(Chapman, 1993, p. 3 - 4).

According to Silver, Strong, and Perini (1997) the rationale for using multiple intelligences in the classroom include the following:

> MI is supported by studies in child development, cognitive skills under conditions of brain damage, psychometrics, changes in cognition across history and within different cultures, and psychological transfer and generalization . . . Gardner's model is backed by a rich research base that combines physiology, anthropology, and personal and cultural history. This theoretical depth is sadly lacking in most learning-style models (p. 22).

It is essential for schools to identify a broad range of intelligence and coordinate educational practice to promote multiple intelligences in children. Teachers need to be able to recognize and reflect on a multitude of learning styles and alternate strategies (Muir, 2000). In order to cater to a vast range of ability levels and motivation levels in reading, multiple intelligence addresses individual learning styles. Multiple intelligences allow educators "to look more carefully at children, to examine their own assumptions about potential and achievement, to consider a variety of approaches to teaching, and to try out alternative forms of assessment" (Gardner, 1994, p. 583). Teachers need to design curriculum that highlights students' strengths in particular intelligences. Teachers need to guide students to use their combination of intelligences to be successful in school.

It is essential that schools provide opportunities for staff development in MI so that teachers can interact with one another in planning challenging meaningful lessons that meet diverse learners' needs (Hoerr, 1994). Expanding the curriculum does not mean eliminating traditional methods. MI theory simply addresses the fact that there is more than one way to teach children (White, Blythe, Gardner, 1992).

Positive outcomes from using MI include increased student collaboration and interpersonal relationships (Glasgow, 1999). As a result, problem solving skills and group decision making tasks are reinforced. As readers, students become more self-reflective, metacognitive, and motivated. Students who are given the opportunity to focus on their strengths in reading enjoy the learning process and tend to not give up as easily when faced with difficulty in other areas (White, Blythe, Gardner, 1992).

In order for learning to be thought provoking and question arousing, the classroom learning experiences need to be connected to the real world (Checkley, 1997).

Implementation of Multiple Intelligences can occur with a four-step initiative that includes:

1. Introducing students to the different intelligences through numerous activities.
2. Becoming aware of students' strengths through observation.
3. Building upon children's areas of strength.
4. Making connections between children's strengths and their areas of weakness.

(Armstrong, 1998)

The key factor associated with improvement of self-esteem and how a student works to accomplish tasks is directly related to working with a child's area of strength (Chen as cited in Armstrong, 1998). Being aware that students possess multiple intelligences and fostering this diversity within the classroom generates motivated learners. Providing these learning opportunities can help students not only in the classroom, but also transfer this knowledge to later in life. Incorporating MI theory on a daily basis and nurturing strengths while building upon areas of weakness will lead to new ways of problem solving and creating. Students will

come away with a true awareness of their strengths and realize there is more than one way to learn.

Student self-assessment and reflection

Lessons presented by teachers need to be created in a way that will help students analyze, reflect, and comprehend how they learn (Black, 1994). When students practice metacognition and think about the learning process, they develop a sense of ownership. Students who are given an opportunity to respond personally tend to develop critical thinking skills, build stronger relationships with others, and have increased self esteem (Glasgow, 1999).

"Metacognition is a process by which students reflect on their own cognitive acts and use that knowledge to direct their processes in thinking to direct their processes in thinking and problem solving activities" (Saint-Laurent, Hebert, Royer, and Desbiens, 1997, p.29). When students are active participants in the assessment process, they are given a sense of control and understanding of purpose of what is learned (Guild, Chock, Eng, 1998). Students are able to make a connection between what they have learned, and what they have yet to achieve.

"Self evaluation from students leads students on a pathway to increased awareness of their thinking process, strategy use, and reflection" (Young, Mathews, Kietzmann, and Westerfield, 1997, p. 350). When students reflect on their development as readers and writers, they are then able to start seeing the connection between reading, writing, and thinking. Being able to self-assess and self reflect is critical thinking (Conant, 1997). Critical thinkers are able to evaluate problems, collect information that is relevant and significant, and interpret information and determine if it is adequate.

The use of weekly reflection journals is essential in evaluating progress in a particular curricular area. Students should reflect on what they learned and what they need help with, make

connections to their own lives and assess what they can improve upon. This process helps students focus on the learning process and its relevance in their lives.

An essential part of balanced assessment is including children in the assessment and evaluation process. Students acquire a better sense of themselves when they become a partner in their own learning process. As students reflect on their learning, they create the tools necessary to become more effective learners. Students need to examine their work and reflect upon their strengths and weaknesses.

"Once students have reflected on their learning, they are ready to set new goals for themselves"(www.eduplace.com/rdg/res/assess/, Sept. 19, 2001). Students should be encouraged to reflect frequently as they move towards their goals and record their observations in a reflection journal. This is beneficial for students for it helps reaffirm their goals and motivate them to reach their goal. Students who practice self assessment become more conscious learners and are able to transfer their knowledge to new situations. Overall, students who actively participate in the assessment process begin to examine their strengths and weaknesses, analyze their academic growth, and make goals for their future.

There are many different methods of self-assessment, including:

- Writing conferences
- Whole/small group discussion
- Reflection logs/journals
- Weekly self-assessments
- Checklists and inventories
- Teacher - student interviews

These forms of self-assessment share a similar theme: they question students to reexamine their work to identify what knowledge has been mastered and what topics remain ambiguous. Although each form of self-assessment is slightly different, all should allow adequate time for students to thoughtfully evaluate their progress. Students' self-assessments can also provide beneficial feedback to the teacher's instructional plan. Student responses help teachers to identify what students are learning and how they are applying it to other curricular and life situations.

Meaningful self-assessment requires repetition. By providing regular, uninterrupted time for reflection, students can get the practice they need to become adequate reflectors. Guidance may be needed at first to get students on the right track. However, the more practice students get at collecting and reacting to their work the more they are involved in student conferences, the more students will realize the importance of self-assessment (www.eduplace.com/rdg/res/assess/, Sept. 19, 2001).

Many students get little practice and guidance in self-assessment and evaluation, yet it is the highest level of thinking in Bloom's Taxonomy. Students are not often asked to justify their opinions when completing a task. However, incorporating evaluation into literacy activities increases student thinking levels and self-awareness. "Just as self-assessment can lead to self-awareness, self-awareness leads to a sense of ownership" (Conant, 1997, p. 1). Students value their problem-solving skills when there is full ownership involved.

Reflection helps students understand how their thinking works. Structured reflection asks students to ponder their thoughts and insights for a while and act upon them when the time is right. "The goal of reflection is to give students time for that insight to develop"(Conant, 1997,

p. 3). Students are thus making their thinking visible when they record their reflections over time (Conant, 1997).

Self-assessment strategies that are used throughout the year gives students information about the quality and focus of their work. When students are given the opportunity for reflection, they become empowered and aware of their improvement in the steps and final product of their work (www.curriculumfutures.org/assessment/a07-self-assess.html, Sept. 18, 2001).

Student Choice

Students need to be given meaningful choices in relation to curriculum, instructional strategies, assessment, and evaluation. When students are given the opportunity to make choices regarding their learning, they are more apt to choose a project relating to their comfort level. This will produce enhanced learning. Taking into account the student's learning style will determine how students will reach specific objectives (Checkley, 1995).

"Students . . . need some choices in their reading and writing that provide links to their own interests, experiences, and prior content knowledge . . . " (Hebb, 2000, p. 23). When students are allowed choices in their reading material, we show that we respect them as individuals and value their opinions.

"When teachers give their students the freedom of personal response, those students develop autonomy, critical thinking, interpersonal relationships and sense of self-worth" (Glasgow, 1999, p. 88). Students need to be provided with choices and relate better to the learning process when given choices. Enhancing curriculum by including student' interests make lessons more relevant and meaningful for all students (Checkley, 1995).

When teachers relinquish some control in the learning environment, learners assume more responsibility in decision making, thus increasing student motivation. Student input is key to a positive social climate where common interests and freedom of personal responses are fostered. Flexibility in problem solving and assessment gives students a sense of control and purpose (Black, 1994).

Learning standards work in cooperation with student choice, or student-directed learning. It is vital to remember there are countless ways to meet standards such as portfolio assessment, problem-based learning, and experiential learning (Checkley, 1995). When students are able to investigate and problem solve topics of their own choice, students want to learn. The learning process truly becomes personal and applicable in their own life.

Student goal-setting

Allowing students to set short and long term goals gives them a feeling of empowerment and investment, both of which have been recognized as producing increased interest, commitment, and effort. Goal development is a powerful method in helping students develop responsibility and in achieving academic success. According to Bandura (1986), a major source of motivation is the active setting of goals (as cited in Martino, 1993). When students set their own goals, this provides them with clear expectations and standards for evaluating their performances. Students know what it is that they have to do. This process of student goal-setting may lead to increased student motivation (Mushinski-Fulk, Montgomery-Grymes, 1994). Students creating their own goals fosters increased learner independence, on-task behavior, increased ownership, and time-management skills.

The most powerful way of helping students develop an internal sense of control and responsibility is a structured system of goal-setting. The following steps are needed in a structured goal-setting system according to Martino (1993).

Steps needed for goal-setting

- Identifying the problem
- Develop a goal
- Organizing
- Imagine how to reach a goal
- Initiating the process
- Persistence toward the goal
- Completing the activity
- Transfer their accomplishments into their real-life situations

Teachers can help students put these steps for goal setting in place. Then, in order to achieve the success through goal-setting the following parameters need to be set according to Martino (1993).

Parameters for Reading Goals

- Be specific and measurable in the quantity of achievement in regard to the goals.
- Goals must be attainable.
- The student must want to improve upon the goals.
- Maintain starting and finishing dates for achieving the goals.
- The goals must be in writing.

- The goals must be stated in terms of the expected levels of attainment.
- The goals should be displayed on a score sheet.
- Set the goals for a school term (i.e. weekly, quarterly).

According to Ames (1990, p. 2) "motivation to learn is characterized by long-term quality involvement in learning and commitment to the process of learning." As has been stated factors that help to increase student motivation are Multiple Intelligences, student self-assessment and reflection, student choice, and student goal-setting.

Project Objectives and Processes

As a result of increased instructional emphasis on multiple intelligences during the period of September 2001 to January 2002, the first and fourth grade students from the targeted classes will increase their motivation and performance in reading, as measured by a teacher observation checklist (Appendix E), a student survey, DRA, STAR, and Weekly Student Self-Assessment in Reading (Appendix F).

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

1. A series of activities that increase student knowledge of multiple intelligences will be implemented.
2. Materials that enable the use of multiple intelligences in reading will be utilized.
3. A series of learning activities that incorporate multiple intelligences in reading will be implemented.
4. Weekly self-assessment, individual goal-setting, and student reflection will be incorporated.

Project Action Plan

Week 1

Beginning assessment of students at Site A using Star Reading Test

Beginning assessment of students at Site B Classroom A taken from May 2001 DRA testing

Beginning assessment of students at Site B Classroom B taken from May 2001 Star Reading Test

- Introduce Interpersonal Intelligence
  - Think-Pair-Share: Students will get with a partner and share information.
  - Interview peers in order to get to know one another.
- Introduce Intrapersonal Intelligence
  - Journaling: Students will write independently on a selected topic (ongoing throughout the intervention).
  - Reflection: Students will evaluate their own learning (ongoing throughout the intervention).
- Introduce Verbal/Linguistic Intelligence
  - Buddy reading: Students will partner up with another student in order to practice their oral reading.
  - Reading is Everywhere activity: Students will discover that common objects contain words and that reading is everywhere.
- Introduce Logical/Mathematical Intelligence
  - Pattern making: Students will look for and make patterns using objects supplied in the classroom.

Week 2

- Introduce Visual/Spatial Intelligence
  - Art activity.
- Introduce Bodily/Kinesthetic Intelligence
  - Centers: Students will circulate through designated centers throughout the classroom to reinforce previously taught skills (ongoing throughout the intervention).
  - Introduce energizers: Energizers are appropriate gestures of recognition used to encourage self-esteem of students.
- Introduce Musical/Rhythmic Intelligence
  - Play background music during class time (ongoing throughout the intervention).
  - Introduce various songs to the class.
- Introduce Naturalistic Intelligence
  - Go on an observation nature walk to see, explore, and discover our living world.

Weeks 3-13

- Weekly reading buddies: 1st and 4th grade students will read to one another.
- Students will reflect on what they learned each week, how they felt they performed, and their strengths and weaknesses through a Weekly Student Self-Assessment in Reading.
- Students will set individual reading goals related to self-selected texts.
- Book talks led by student, teacher, guest speaker. A book talk is an introduction or discussion pertaining to a text.
- Daily read-alouds: The teacher will read a text aloud to the class followed by a small group discussion or activity.

- Establish an inviting reading area inside and outside conducive to the exploration of literature.
- Students will role-play characters, events, or interpretations of the text.
- Use graphic organizers to promote analytical thinking. Graphic organizers are visual tools used to display information.
- Use cooperative learning in which students are assigned specific roles in order to achieve a common task.
- Incorporate stretch breaks frequently throughout the day enabling the students to rejuvenate their minds and bodies.
- Incorporate music into literature.
- Running Record: Teacher will listen to each child read a text individually and record accuracy and errors with symbols.

Weeks 14-16

Final assessment of students using Star Reading Test at Site A and Site B Classroom B

Final assessment of students using the Running Record at Site B Classroom A

Tally results of all the testing.

Methods of Assessment

In order to assess the effects of the intervention, Running Records (Appendix G) and the STAR will be administered. In addition, a follow-up student survey will be given along with an analysis of the Weekly Student Self-Assessments in Reading, and evaluation of Teacher Observation Checklists.

Chapter 4

PROJECT RESULTS

Historical Description of the Intervention

As a Group

The objective of this project was to increase student motivation and performance in reading. The use of activities involving multiple intelligences, student self reflection and assessment, student choice, and student goals were chosen as interventions designed to fulfill project objectives.

The following happened in all three classrooms during the first two weeks of the intervention. Students were introduced to all eight multiple intelligences by incorporating activities related to each intelligence. The students were also administered a reading survey on reading attitudes. The results of the pre-inventory were tabulated. At Site A, students were administered the STAR reading test in September to establish independent reading levels. Site B, Classroom 1 used reading level results from DRA testing done in May 2001. Site B, Classroom 2 established reading levels from the STAR reading test administered in May 2001. During the first week of the study, all three classrooms passed out parental consent forms in order for students to participate with data collection for research. Consent forms were turned in.

During the first week of the intervention, all three sites began a teacher observation checklist on On/Off task behavior. At Site B, Classroom 2, the observation was done by the teacher during sustained silent reading time.

Site A

Multiple Intelligences

Students at Site A were introduced to the eight multiple intelligences during the first two weeks of the intervention by first participating in a multiple intelligences survey to see where each of their strengths lies. They also participated in various activities which introduced each intelligence and allowed them to have a basic understanding about each one.

Throughout the rest of the intervention multiple intelligence activities were intricately placed within reading lessons so students had opportunities to excel in their areas of strength. It also gave students opportunities to stretch themselves in some areas of intelligence. Specific activities used to promote this were book reports which the students were allowed to pick from a variety of ways to express themselves in their written report and also a variety of projects which encompass several different intelligences (Appendix H). They enjoyed participating in a multiple intelligence unit incorporated within an invention unit in reading. It allowed students to pick activities from a variety of intelligences throughout the unit (Appendix I). Another major source of multiple intelligence activities came at Thanksgiving time with a great variety of activities to celebrate the holiday in place of our regular reading unit.

Student Self-Assessment and Reflection

On a weekly basis, students at Site A filled out a reading reflection. This began on the third week of the intervention and continued throughout the rest of the intervention. Students

were asked to reflect on what was learned, what connections they could make to their real life, what they needed help with, or time to work on, and any goals for the following week. What was most interesting about these reflections is how much more the students wrote as they got more experienced with them. They became more insightful as they went beyond just telling the facts about the stories they read, and added the stories' meanings and what that meant to them. It became very helpful to know what the students felt they needed help with throughout the intervention, so the teacher could be more in tune with their needs and address them. Many of the activities completed during the intervention had a self-assessment aspect built into the assessment portion. For example the book reports are assessed by the teacher, a peer, and themselves. These reflections made the students more accountable for their own learning, rather than relying on the teacher evaluation.

Student Choice

Students were given choice in a variety of ways within Site A. Students always have choices of the books they want to read for Accelerated Reader. They also get to choose the book report books they want to read within certain categories. Connected with book reports students also have a choice of what written report and project they want to complete for each book report. Within the inventions unit the students individually and in groups were given choices of various activities. They got to choose between various activities such as making a new musical instrument, making an invention to help a pet, making a time line of inventions, and making a video reenacting an important invention. Choice created in students the opportunity to put more of themselves into what they wrote and produced. It is exciting to see the amount of pride students have in something they have created if they are able to choose parts of it on their own.

Student Goal Setting

Each week the students filled out sheets to state their goals for next week in reading. Many began by writing down either very limited goals or unachievable goals. As the intervention proceeded and the students shared their successes or failures of their goals many began to get very specific and realistic with their goals. This made their goals much more attainable. Some continued to struggle throughout the intervention to state goals in a way that they would be achievable. Some tended to write the goal and then completely forget about it. Goals gave students the opportunity to have something to work toward and then feel success.

Site B, Classroom 1

Multiple Intelligences

Students at Site B, Classroom 1 were introduced to the eight multiple intelligences during the first two weeks of the intervention. Students participated in activities which fostered a general knowledge of the various intelligences.

Throughout the duration of the intervention, the eight multiple intelligences were intertwined throughout the reading curriculum. On a daily basis, students had the opportunity to strengthen their abilities in various intelligences as well as expand their competence in weaker areas of their intelligence. Verbal/linguistic, visual/spatial, musical/rhythmic, and bodily/kinesthetic activities were key factors in the students' motivation in reading. Through the use of songs, dances, Reader's Theater, graphic organizers, and cooperative learning, students interest in reading was heightened.

On a weekly basis, students strengthened their interpersonal skills through the use of Reading Buddies. Students met with fourth grade buddies to participate in partner reading. The

use of buddy reading really seemed to motivate the students. They looked forward to the activity every week and were always on-task during the buddy reading time.

Student Self-Assessment and Reflection

Students at Site B, Classroom 1 completed a reading self-assessment on a weekly basis. This began the fourth week of the intervention and continued throughout the remainder of the intervention. The students completed the self-assessments with assistance from their fourth grade reading buddies. The fourth graders helped the students read and fill out the reading self assessment. Students were asked to reflect on how they felt they did in reading during the week and to choose a plan to improve their reading for the following week.

The reading self-assessment reflected that all students, whether fluent or struggling readers, felt they performed well in reading every week. Throughout the intervention, students exhibited improvement in their self-assessment. Each week, most students varied their plan to amend their reading for the coming week by choosing pertinent and appropriate strategies to yield better results in their reading. Overall, the reading self-assessments yielded a sense of ownership in the students. Students shared expectations for their growth in reading.

Student Choice

Students at Site B, Classroom 1 were granted choice in their reading selections on a daily basis. At the conclusion of every day, students had the opportunity to select a book to bring home to read for homework. Students also had the occasion once a week to visit the school library to choose a book. Students would select books that they found appealing and that were at their appropriate reading level. Students who were well motivated chose books they liked in order to fulfill their reading goal for the week. Students were more likely to meet their goals if

they found interest in the books and if they had access to a wide array of texts. Lastly, students had choice in the books they read with their fourth grade buddies. Students were always engaged during buddy reading time because they possessed high interest in the reading material. Overall, offering choice to the students resulted in an increase in their motivation to meet their reading goals and in completing their homework.

Student Goal Setting

Students at Site B, Classroom 1 completed weekly reading goal sheets (Appendix J). At the beginning of every week, students selected a number of books that they were going to strive to read for the week. Since this was the students first experience with goal setting, they were guided to select between five and ten books to read a week. In order to meet their goals, students were required to red a book independently or have someone read a book to them. Students were obligated to obtain their parent's signature verifying their fulfillment of their goals. Throughout the intervention, less than half of the students met their reading goals each week. Some of the students began the intervention with unattainable goals; however, they adjusted their goals each week to help reach their targeted number of books. Several of the students were inconsistent in their goal setting and fluctuated their book number selection weekly. A few of the students established an attainable goal early in the intervention and were consistent with their goals during the remainder of the intervention. Many of the students were unsuccessful in accomplishing their weekly reading goal. It was apparent with these students that goal setting did not contribute in motivating these students to increase their free reading time. Overall, it was the students who already possessed an intrinsic desire to read who were the individuals motivated to achieve their weekly reading goals.

Site B, Classroom 2

Multiple Intelligences

Students at Site B, Classroom 2 were given a multiple intelligences survey the first week of the intervention in order to help familiarize them with basic concepts. The survey provided the teacher and students the insights to see where student interests primarily exist.

Daily, students had the opportunity to become more comfortable with the eight intelligences. The intelligences were interwoven into all curricular areas, with a deeper emphasis in reading. Weekly, fourth grade students met with first grade buddies in order to partner read with them. This interpersonal and verbal linguistic intelligence was highly motivating to all involved. Students anticipated this weekly, and were also fully participating. Weekly book talks gave students the opportunity to become introduced to a variety of genres and authors which increased interest in reading and prompted creative book projects rather than standard book reports. Students favored the interpersonal intelligence, having the ability to work on reading projects with partners or small groups. Guest speakers related to specific topics sparked interests in genres and encouraged students to explore books beyond their comfort zone. This increased student motivation in particular topics which had not previously been introduced.

Student Self-Assessment and Reflection

On a weekly basis, students at Site B, Classroom 2 filled out a reading reflection. This began on the third week of the intervention. Students were asked to reflect on what was learned, what connections they could make to their real life, what they needed help with or time to work on, and any goals for the following week. Over the intervention period, most students became more at ease with this process and thoughtful in their responses. The reflection encouraged them

to make connections and expected students to recall what was learned. A few students, primarily the struggling readers with lower independent reading levels, had difficulty filling out the sheet from week to week. The areas that proved to be the most difficult for them were: writing about what they learned and making connections to their real life. These same students struggle with writing as well, so this could be one cause. To assist all students, at the end of each week, the class would brainstorm what was learned in reading for the week to help struggling writers. Overall, the student self-assessment and reflection encouraged students to be more accountable for their learning each week. Students were aware of the expectations and became more reflective throughout the process.

Student Choice

Students at Site B, Classroom 2 were given choice in numerous ways. Each week, when going to the school library, students were able to choose any two books to read independently. This tied in with their goal setting, so students definitely made careful and considerate choices. Knowing that they wanted to reach their goals, they chose books that interested them and were at their reading level. Students were aware of the reading level range because they were given cards with their range listed. This proved to be extremely helpful as students selected books.

Students were also introduced to numerous ways to produce book reports. Choices were given and because of the variety, book reports became exciting projects that students wanted to work on at home and share with the class. Students that in the past had difficulty finishing book reports began to turn them in on a regular basis and were motivated to do so.

Giving students choices encouraged them to have a larger commitment in what was read and increased their motivation to read more carefully and thoughtfully.

Student Goal Setting

Students at Site B, Classroom 2 filled out weekly reading goal sheets. Students were asked to write down their books chosen for independent reading, an author, genre, goal for how much they would read and how they would show what was read. The following week, students were also expected to reflect on their goals. Students had to explain if they achieved their goal, why they did or did not, and to reflect on how they would improve their reading performance the following week. Once students understood genre, they became comfortable at goal setting. Students who set goals were more likely to reach their goals. When students did not reach their goals, they were very honest in regards to why goals were not reached. Each month of the intervention the entire class was given a goal in regards to how many books they were successfully read in a month. A few students consistently did not achieve their individual goals. Even with weekly individual meetings with students to discuss goals and selections, for some students this did not make a difference. On a whole, however, the majority of students found goals helpful and meaningful. The goals were personal and had relevance to each student, which prompted higher individual accountability. At Site B, Classroom 2, parents were updated monthly with a reading newsletter which included the number of books individual students read as well as current themes and goals. This enabled parents to become aware of student achievement and also made students more accountable (Appendix K).

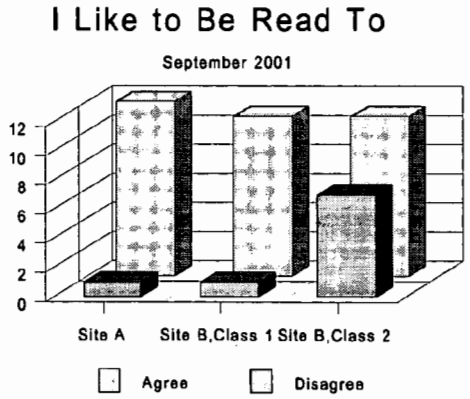
Presentation and Analysis of Results

The following figures each contain graphs of comparison. Many pairs of graphs have different scales because there were some increases in students who agreed with statements between September and December.

Figure 18 shows the comparison of student reading survey results as reported in September 2001 and December 2001. The figure shows the students response to the statement, "I like to be read to." In September 2001 at Site A, 12 students liked to be read to, while 1 student did not. In December 2001 at Site A, 10 students liked to be read to, while 3 students did not. In September 2001 at Site B, Classroom 1, 11 students liked to be read to, while 1 student did not. In December 2001 at Site B, Classroom 1, 10 students liked to be read to, while 2 students did not. In September 2001 at Site B, Classroom 2, 11 students liked to be read to, while 7 students did not. In December 2001 at Site B, Classroom 2, 17 students liked to be read to, while 1 student did not.

It is evident from the results of the survey that Site A had a slight decrease for students who enjoy being read to. This could be attributed to students gaining more independence in their own reading. At Site B, Classroom 1, results stayed fairly consistent showing little change. This could be due to lack of student confidence and independence in their own reading. At Site B, Classroom 2, a more drastic change occurred with more students wanting to be read to. This could be a result of book talks, guest speakers, and daily read alouds piquing interest in various reading areas.

Figure 18



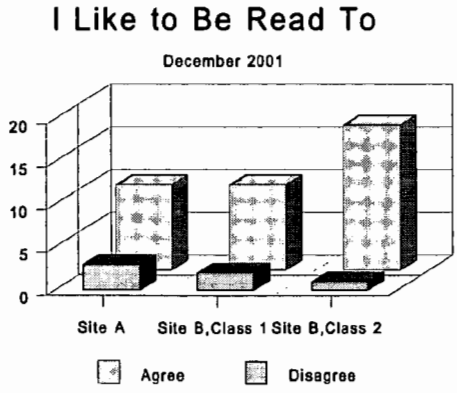


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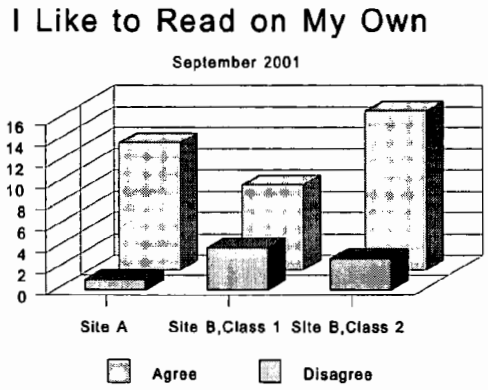
Figure 19 shows the comparison of student reading survey results as reported in September 2001 and December 2001. The figure shows the students response to the statement, "I like to read on my own." In September 2001 at Site A, 12 students liked to read on their own, while 1 student did not. In December 2001 at Site A, 13 students liked to read on their own, while 0 students did not. In September 2001 at Site B, Classroom 1, 8 students liked to read on their own, while 4 students did not. In December 2001 at Site B, Classroom 1, 9 students liked to read on their own, while 3 students did not. In September 2001 at Site B, Classroom 2, 15 students liked to read on their own, while 3 students did not. In December 2001 at Site B, Classroom 2, 16 students liked to read on their own, while 2 students did not.

It is evident from the results of the survey that at all three sites the response by students enjoying reading on their own remained stable. Students motivated at the beginning of the intervention remained interested in their independent reading throughout the whole time. Students not interested in independent reading in September did not change their opinions even with the application of the intervention.

Figure 19



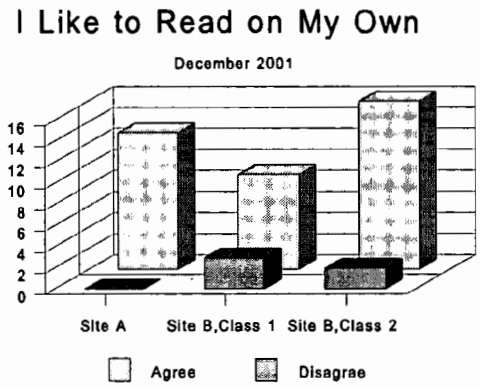


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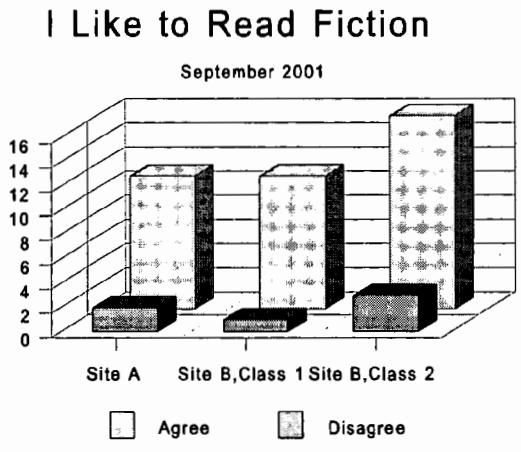
Figure 20 shows the comparison of student reading survey results as reported in September 2001 and December 2001. The figure shows the students response to the statement, "I like to read fiction." In September 2001 at Site A, 11 students liked to read fiction, while 2 students did not. In December 2001 at Site A, 13 students liked to read fiction, while 0 students did not. In September 2001 at Site B, Classroom 1, 11 students liked to read fiction, while 1 student did not. In December 2001 at Site B, Classroom 1, 11 students liked to read fiction, while 1 student did not. In September 2001 at Site B, Classroom 2, 16 students liked to read fiction, while 3 students did not. In December 2001 at Site B, Classroom 2, 18 students liked to read fiction, while 0 students did not.

It is evident from the results of the survey that at all three sites, results of students enjoying the reading of fiction remained constant. The interest was high at the beginning; thus many students did not change their opinion of fiction.

Figure 20



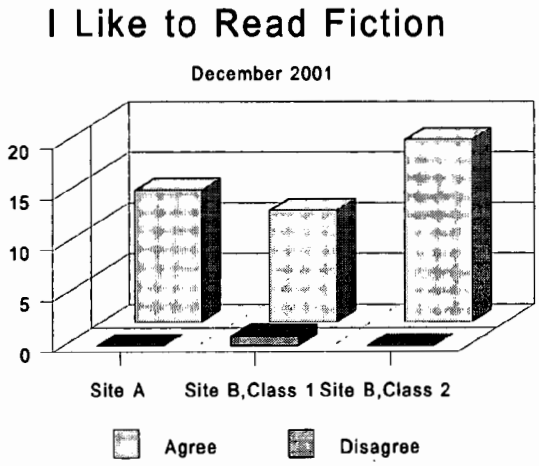
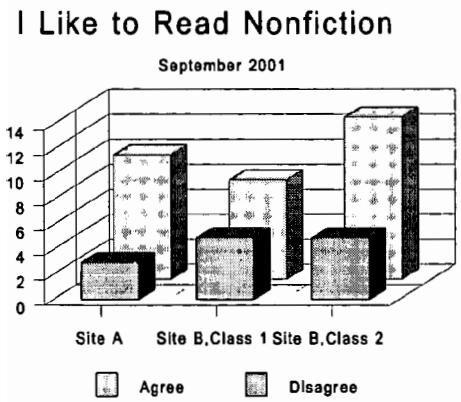


Figure 21 shows the comparison of student reading survey results as reported in September 2001 and December 2001. The figure shows the students response to the statement, "I like to read nonfiction." In September 2001 at Site A, 10 students liked to read nonfiction, while 3 students did not. In December 2001 at Site A, 8 students liked to read nonfiction, while 5 students did not. In September 2001 at Site B, Classroom 1, 8 students liked to read nonfiction, while 5 students did not. In December 2001 at Site B, Classroom 1, 7 students liked to read nonfiction, while 5 students did not. In September 2001 at Site B, Classroom 1, 13 students liked to read nonfiction, while 5 students did not. In December 2001 at Site B, Classroom 1, 15 students liked to read nonfiction, while 3 students did not.

It is evident from the results of the survey that at all three sites, results of students enjoying the reading of nonfiction remained constant with only slight increases. This interest again was high at the beginning and remained so at the end of the intervention.

Figure 21



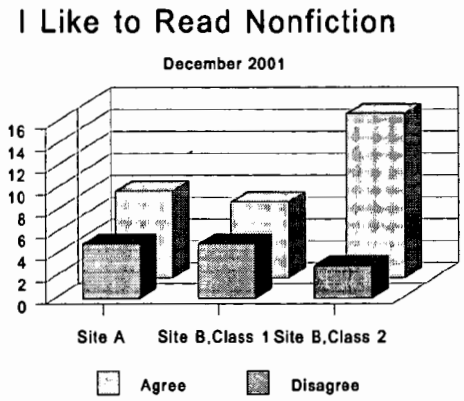
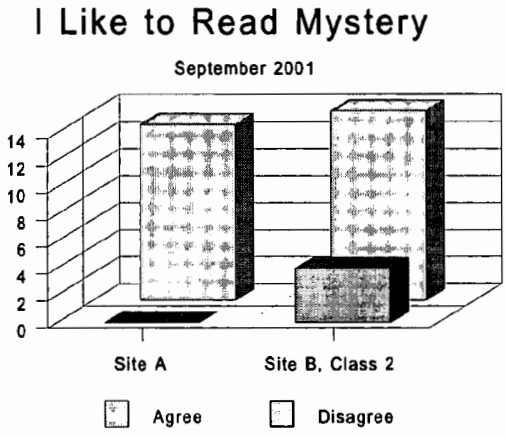


Figure 22 shows the comparison of student reading survey results as reported in September 2001 and December 2001. The figure shows the students response to the statement, "I like to read mystery." In September 2001 at Site A, 13 students liked to read mystery, while 0 students did not. In December 2001 at Site A, 11 students liked to read mystery, while 2 students did not. In September 2001 at Site B, Classroom 2, 14 students liked to read mystery, while 4 students did not. In December 2001 at Site B, Classroom 2, 16 students liked to read mystery, while 2 students did not.

It is evident from the results of the survey that at Site A, there was a slight decrease in the number of students who enjoy reading mystery books. There was not an emphasis put on the genre of mystery. Therefore, student interest in this genre declined. At Site B, Classroom 2, there was a slight increase in the number of students enjoying mysteries. At this site, a book talk was done on the genre of mystery, thus contributing to an increase of student enjoyment.

Figure 22



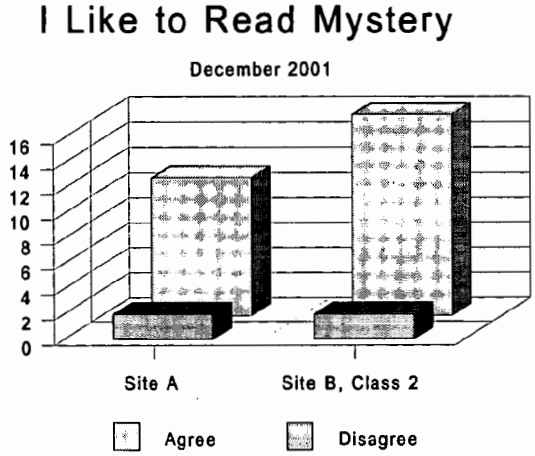
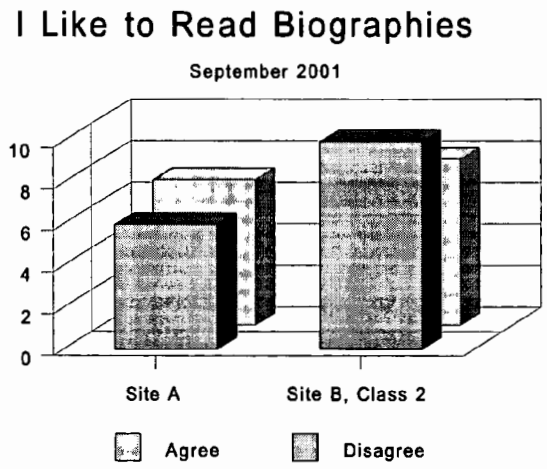


Figure 23 shows the comparison of student reading survey results as reported in September 2001 and December 2001. The figure shows the students response to the statement, "I like to read biographies." In September 2001 at Site A, 7 students liked to read biographies, while 6 students did not. In December 2001 at Site A, 9 students liked to read biographies, while 4 students did not. In September 2001 at Site B, Classroom 2, 8 students liked to read biographies, while 10 students did not. In December 2001 at Site B, Classroom 2, 9 students liked to read biographies, while 9 students did not.

It is evident from the results of the survey that at Site A and Site B, Classroom 2, there was a slight increase in the number of students who enjoyed reading biographies. At both sites, biographies were focused upon through book talks and book reports, thus contributing to the growth in student enjoyment of biographies.

Figure 23



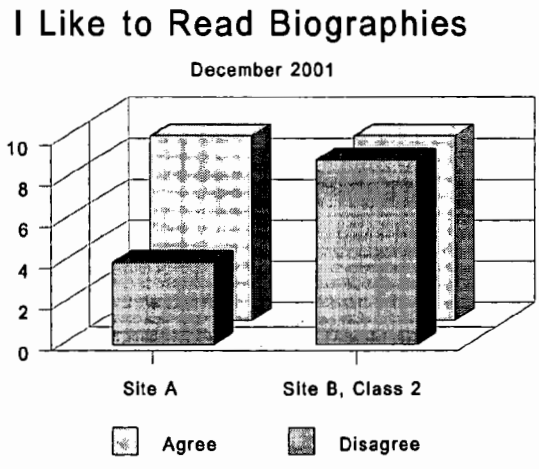
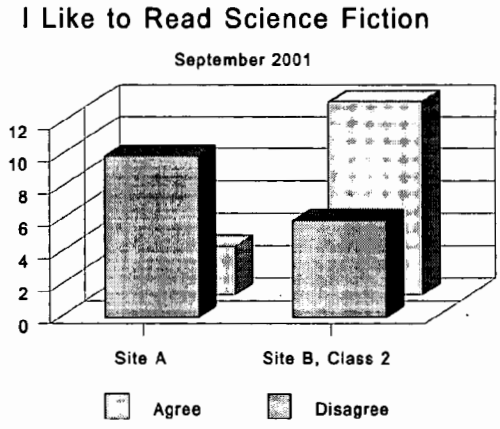


Figure 24 shows the comparison of student reading survey results as reported in September 2001 and December 2001. The figure shows the students response to the statement, "I like to read science fiction." In September 2001 at Site A, 3 students liked to read science fiction, while 10 students did not. In December 2001 at Site A, 4 students liked to read science fiction, while 9 students did not. In September 2001 at Site B, Classroom 2, 12 students liked to read science fiction, while 6 students did not. In December 2001 at Site B, Classroom 2, 10 students liked to read science fiction, while 8 students did not.

It is evident from the results of the survey that at Site A and Site B, Classroom 2, there was a slight decrease in students' interest in science fiction. This decrease can be a result of low integration of this genre throughout the curriculum and the high frustration level of text readability for low and average readers.

Figure 24



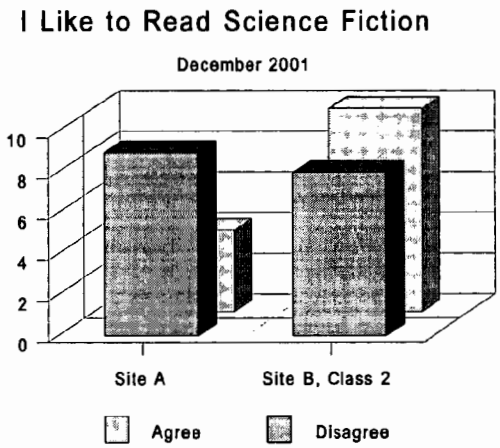
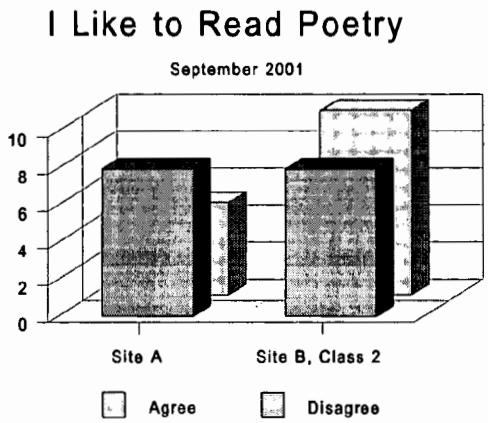


Figure 25 shows the comparison of student reading survey results as reported in September 2001 and December 2001. The figure shows the students response to the statement, "I like to read poetry." In September 2001 at Site A, 5 students liked to read poetry, while 8 students did not. In December 2001 at Site A, 6 students liked to read poetry, while 7 students did not. In September 2001 at Site B, Classroom 2, 10 students liked to read poetry, while 8 students did not. In December 2001 at Site B, Classroom 2, 15 students liked to read poetry, while 3 students did not.

It is evident from the results of the survey that at Site A there was a minimal change in the number of students who like poetry. This can be contributed to the lack of poetry integrated throughout the reading curriculum. At Site B, Classroom 2, there was evident growth in student enjoyment of poetry. This is a result of book talks and the availability of poetry books in the classroom.

Figure 25



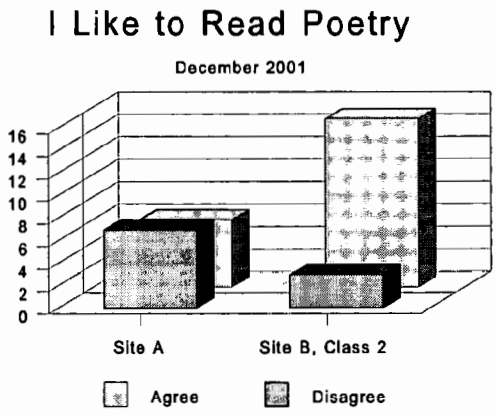


Figure 26 shows the comparison of student reading survey results as reported in September 2001 and December 2001. The figure shows the students response to the statement, "I like to read magazines." In September 2001 at Site A, 9 students liked to read magazines, while 4 students did not. In December 2001 at Site A, 9 students liked to read magazines, while 4 students did not. In September 2001 at Site B, Classroom 2, 17 students liked to read magazines, while 1student did not. In December 2001 at Site B, Classroom 2, 16 students liked to read magazines, while 2 students did not.

It is evident from the results of the survey that at Site A and Site B, Classroom 2, the number of students who enjoy reading magazines remained consistent. This may be the result of student interest in advertisements and the minimal amount of text found in magazines.

Figure 26

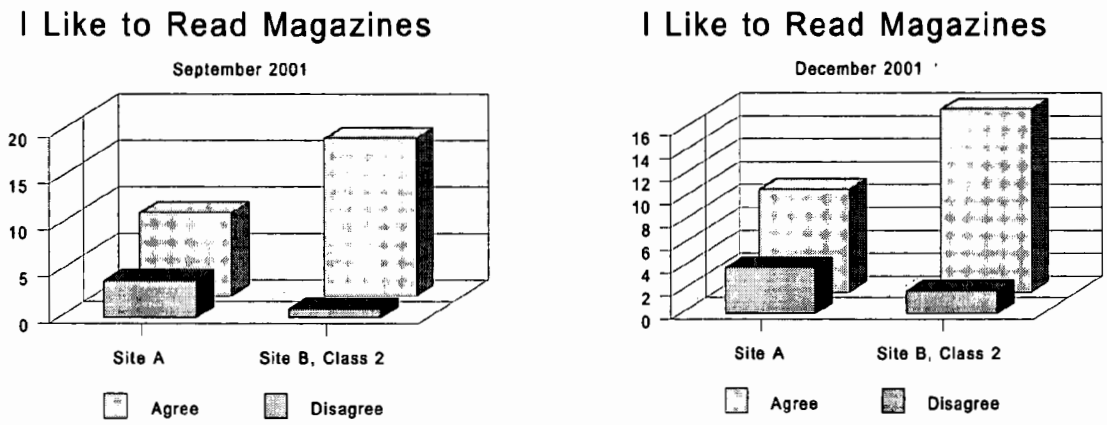


Figure 27 shows the comparison of student reading survey results as reported in September 2001 and December 2001. The figure shows the students response to the statement, "I like to read comic books." In September 2001 at Site A, seven students liked to read comic books, while 6 students did not. In December 2001 at Site A, 8 students liked to read comic books, while 5 students did not. In September 2001 at Site B, Classroom 2, 12 students liked to read comic books, while 6 students did not. In December 2001 at Site B, Classroom 2, 16 students liked to read comic books, while 2 students did not.

It is evident from the results of the survey that at Site A, there was a low increase in student enjoyment of comic books. At this site, there was no emphasis on this genre in the curriculum. At Site B, Classroom 2, there was a greater growth in student enjoyment of comic books. This may be the result of the interest in illustrations in several students in the class. Their interest led them to select comic books for their book reports. These students shared their reports with the class, which may have resulted in the increase of student interest at Site B, Classroom 2 in comic books.

Figure 27

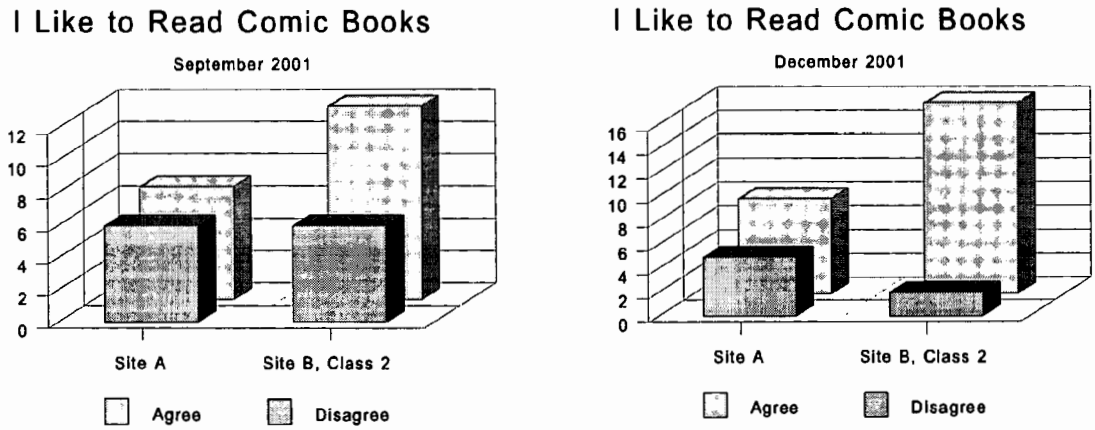
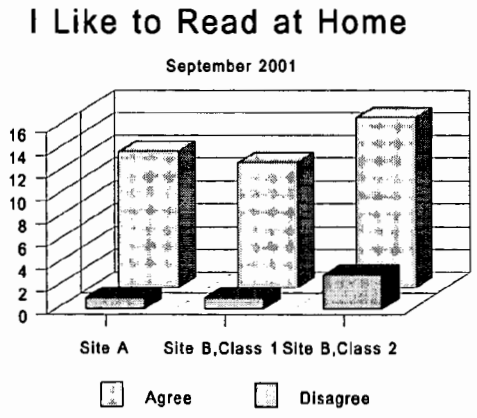


Figure 28 shows the comparison of student reading survey results as reported in September 2001 and December 2001. The figure shows the students response to the statement, "I like to read at home." In September 2001 at Site A, 12 students liked to read at home, while 1 student did not. In December 2001 at Site A, 13 students liked to read at home, while 0 students did not. In September 2001 at Site B, Classroom 1, 11 students liked to read at home, while 1 student did not. In December 2001 at Site B, Classroom 1, 10 students liked to read at home, while 2 students did not. In September 2001 at Site B, Classroom 2, 15 students liked to read at home, while 3 students did not. In December 2001 at Site B, Classroom 2, 16 students liked to read at home, while 2 students did not.

It is evident from the results of the survey that at all three sites, the number of students who liked to read at home showed minimal change. This indicates that the interventions implemented during the three-month period did not greatly impact student motivation in reading at home. Students who enjoyed reading at home in September sustained their motivation during the intervention, while those who did not like reading at home remained consistent in their opinion.

Figure 28



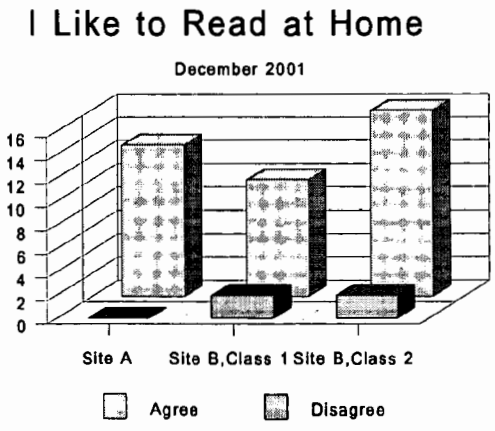
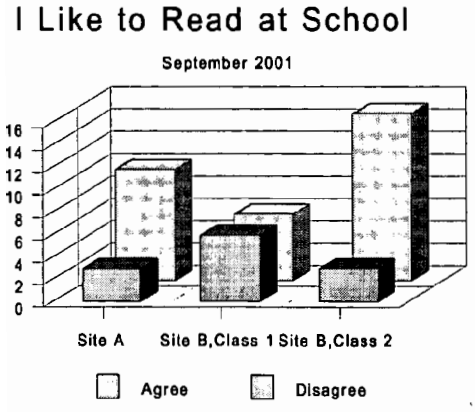


Figure 29 shows the comparison of student reading survey results as reported in September 2001 and December 2001. The figure shows the students response to the statement, "I like to read at school." In September 2001 at Site A, 10 students liked to read at school, while 3 students did not. In December 2001 at Site A, 13 students liked to read at school, while 0 students did not. In September 2001 at Site B, Classroom 1, 6 students liked to read at school, while 6 students did not. In December 2001 at Site B, Classroom 1, 8 students liked to read at school, while 4 students did not. In September 2001 at Site B, Classroom 2, 15 students liked to read at school, while 3 students did not. In December 2001 at Site B, Classroom 2, 17 students liked to read at school, while 1 student did not.

It is evident from the results of the survey that at all three sites, there was a raise in the amount of students who are fond of reading at school. This may be contributed to the risk-free reading environment established at all three sites. At all sites, an inviting reading area was provided for students to select books during free reading time. At Site B, Classrooms 1 and 2, this increase may also be the result of reading buddies which occurred on a weekly basis between the two classes throughout the intervention.

Figure 29



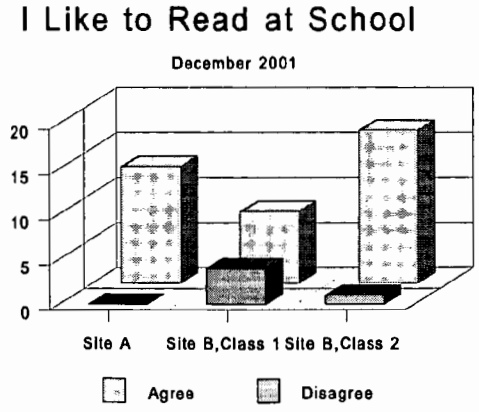


Figure 30 shows the comparison of student reading survey results as reported in September 2001 and December 2001. The figure shows the students response to the statement, "I read every day." In September 2001 at Site A, 6 students read every day, while seven students did not. In December 2001 at Site A, 7 students read every day, while 6 students did not. In September 2001 at Site B, Classroom 1, 11 students read every day, while 1 student did not. In December 2001 at Site B, Classroom 1, 10 students read every day, while 2 students did not. In September 2001 at Site B, Classroom 2, 7 students read every day, while 11 students did not. In December 2001 at Site B, Classroom 2, 18 students read every day, while 0 students did not.

It is evident from the results of the survey that at Site A and Site B, Classroom 1, there was a slight increase of students who read every day. At Site B, Classroom 2, there was a greater growth of students who read every day. In September, students may not have read every day because they did not read much during the summer. In December, the increase of students reading every day may be the result of weekly reading goals, daily reading homework assignments, and daily sustained silent reading.

Figure 30

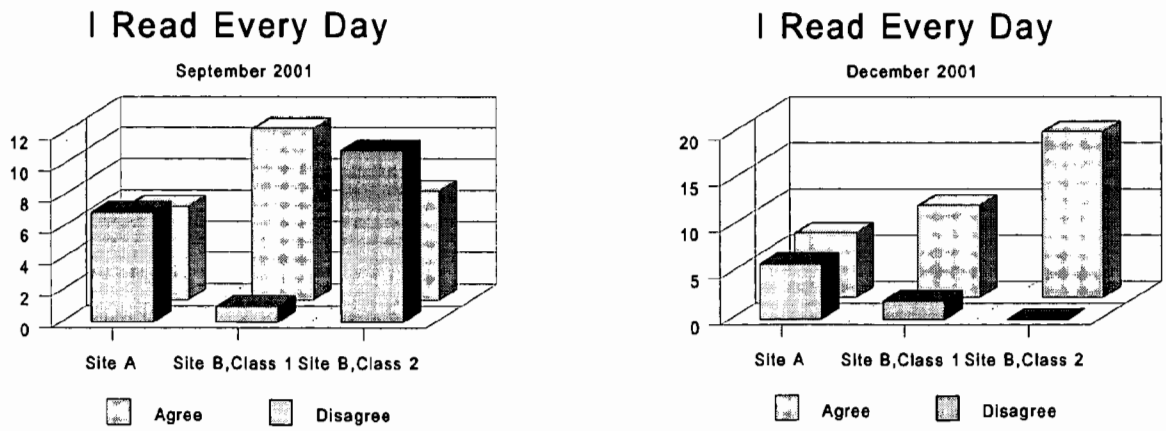
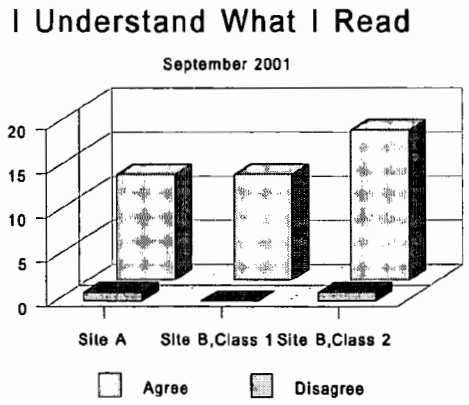


Figure 31 shows the comparison of student reading survey results as reported in September 2001 and December 2001. The figure shows the students response to the statement, "I understand what I read." In September 2001 at Site A, 12 students understand what they read, while 1 student did not. In December 2001 at Site A, 11 students understand what they read, while 2 students did not. In September 2001 at Site B, Classroom 1, 12 students understand what they read, while 0 students did not. In December 2001 at Site B, Classroom 1, 7 students understand what they read, while 5 students did not. In September 2001 at Site B, Classroom 2, 17 students understand what they read, while 1 student did not. In December 2001 at Site B, Classroom 2, 18 students understand what they read, while 0 students did not.

It is evident from the results of the survey that at Site A and Site B, Classroom 2, the amount of students who understand what they read remained consistent. This may result from direct instruction of comprehension skills in the classroom and from students selecting Accelerated Reader books at their readability level. At Site B, Classroom 1, there was a decrease in the number of students who understand what they read. This may be the result of students focusing more on decoding skills when reading rather than comprehension skills.

Figure 31



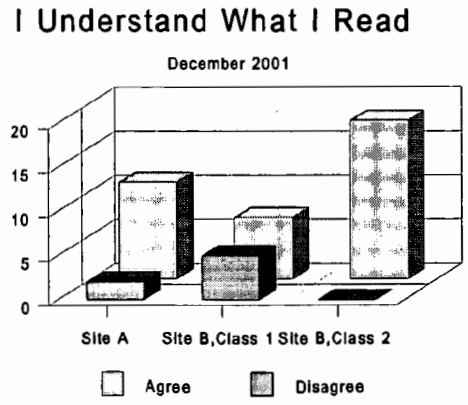
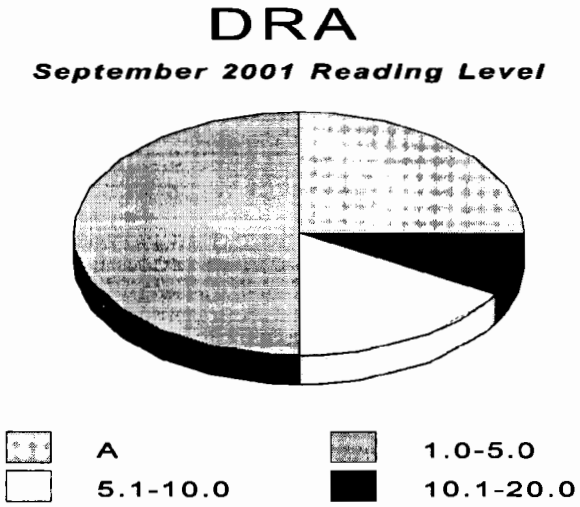


Figure 32 shows the comparison in DRA reading levels at Site B, Classroom 1, from September 2001 through December 2001. It shows that student reading levels remained consistent in the 1.0-5.0 range. It also shows an increase in student reading levels 5.1-20.0 and a decrease in the amount of students reading at a level A. Overall, it shows a growth in student reading abilities throughout the intervention and a majority of students at Site B, Classroom 1, are reading at or above grade level.

Figure 32

Site B, Classroom 1



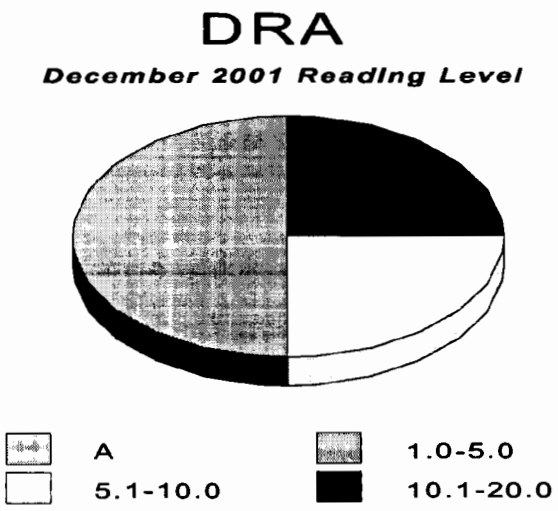


Figure 33 shows the comparison between the STAR reading levels at Site B, Classroom 2, from May 2001 to December 2001. It shows that student reading levels which represent grade levels remained consistent in the 0.0-1.5 and 4.6-6.0 reading ranges. The figure also shows a large decrease in the amount of students reading at a 1.6-3.0 reading level. The figure shows the biggest increase in students reading at a 3.1-4.5 reading range. Overall, the figure shows that a majority of students at Site B, Classroom 2, are reading at or above grade level, with increased growth from the 1.6-3.0 to the 3.1-4.5 range.

Figure 33

Site B, Classroom 2

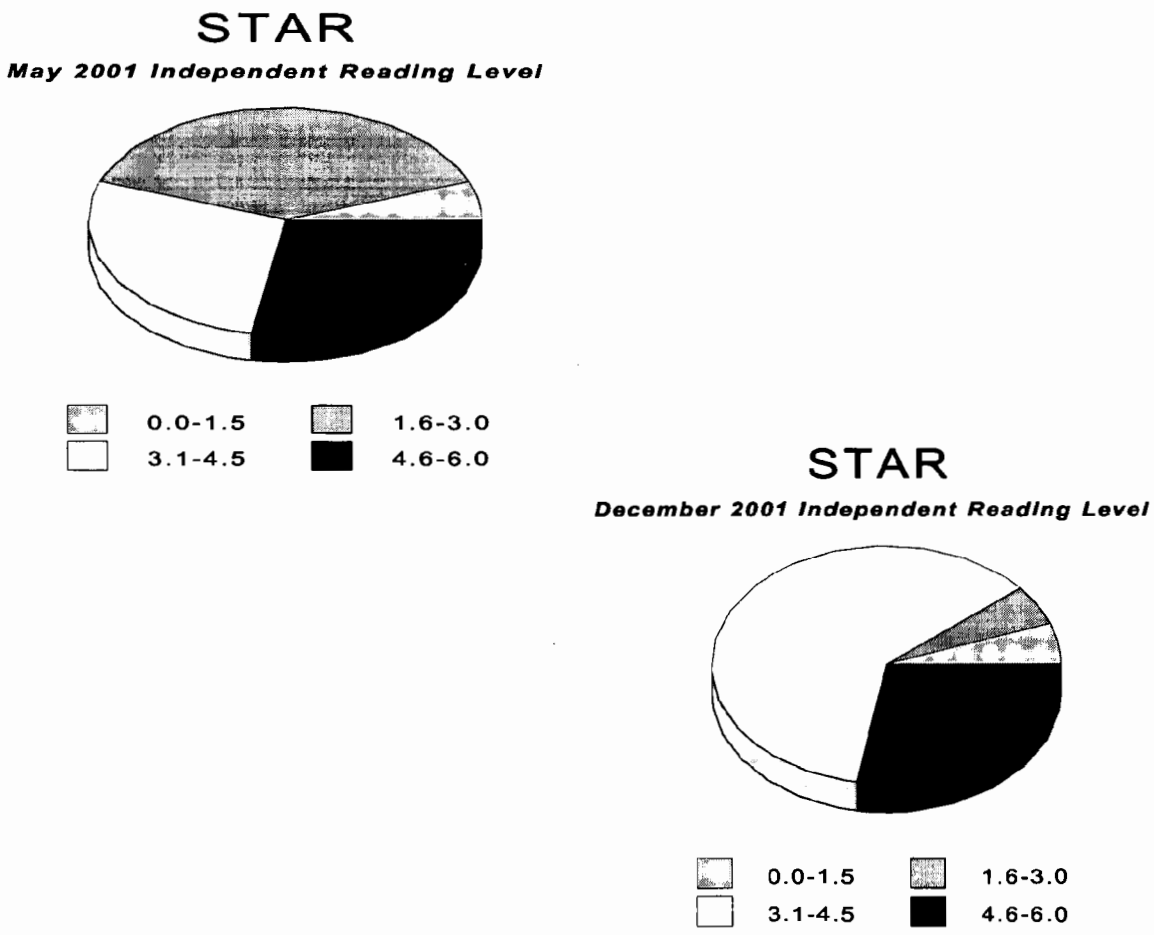


Figure 34 shows the comparison between the STAR reading levels at Site A from September 2001 to December 2001. It shows an increase in students reading at a 4.0-4.9 reading range. It also shows a slight increase in students reading at a 6.0-6.9 reading range. The figure also shows that students reading at a level 3.0-3.9 in September had an increase in their reading growth. This is evident by both the decrease in level 3.0-3.9 in December and the increase in levels 4.0-6.9 in December. Overall, the figure shows a growth in student STAR reading levels form September to December.

Figure 34

Site A

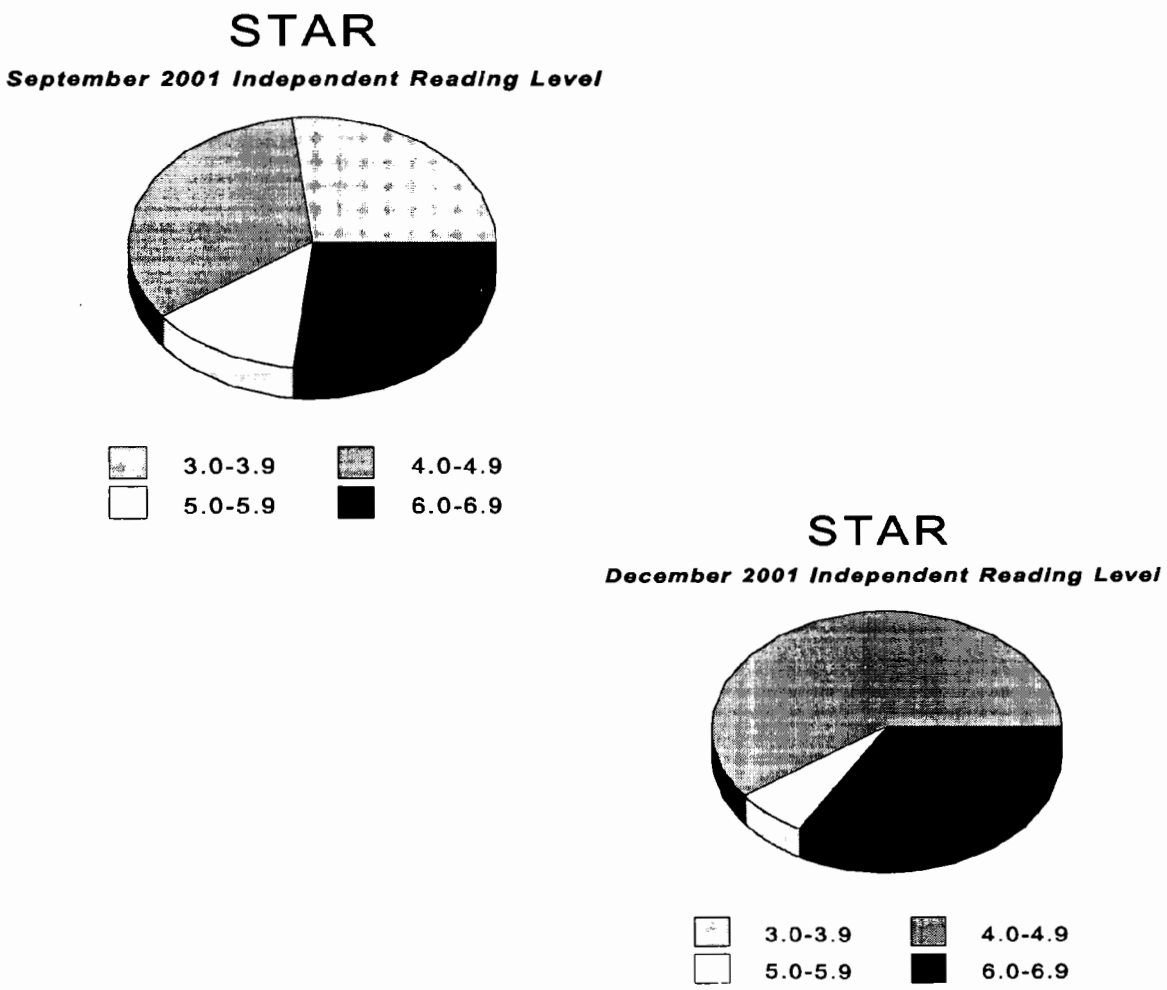
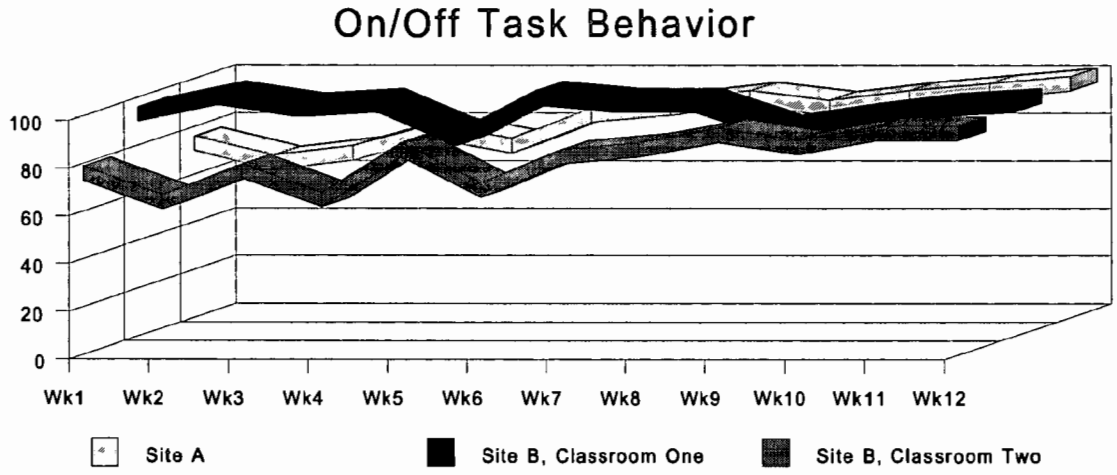


Figure 35 displays the percentage of students on and off task during the twelve weeks of intervention at all three classrooms. It is evident that throughout the intervention there was an increase in on task behavior during reading activities in all three classrooms.

Figure 35



Conclusions and Recommendations

Based on the improvements seen from the data on student surveys, reading assessments, observation checklists and student goals, several conclusions can be made.

The use of integrating multiple intelligences into daily lesson plans clearly increased student motivation in reading. With the use of a broadened curricular scope, a focus was placed on individual student learning styles. Students developed an appreciation for reading that went beyond the classroom as shown in reading interest surveys. Curiosity was piqued and promoted during lessons because of the diversity in presentation and opportunity for increased student collaboration. Interpersonal relationships grew because of increased problem solving opportunities and projects. Self-esteem was also increased as students became more comfortable

with the learning process. Multiple intelligences enabled students to learn in a style that fit individual needs.

Recommendations for researchers include more extensive analysis of the multiple intelligence surveys filled out by students. This would help to improve alignment of curriculum with student interests. For teachers, recommendations include selecting fewer number of intelligences to work with each week. Time restraints may limit the amount of purposeful multiple intelligence lessons created and successfully implemented. This would allow teachers to devote more time to creating more meaningful activities.

The implementation of goal-setting was a great success to the study. When students set weekly reading goals, they had a definite focus of an outcome to work toward. Setting individual weekly goals increased books read by students. More important, not only the quantity of books read increased, but the quality of how carefully students read increased as well. This was made evident through student/teacher conferences, quality of book reports and projects, and increased comprehension on tests.

Recommendations for researchers and teachers include delaying the introduction of goal-setting in a primary classroom. Lack of independent student reading ability led to difficulty in achieving a weekly goal. Primary students had to rely on parent involvement in order for them to achieve their goals. It would also be encouraged to conduct weekly student/teacher goal-setting conferences. As a teacher, it would be recommended to provide reasonable goal-setting guidelines to improve student understanding. This would highlight accountability and further increase motivation.

Giving students choice played a crucial role in the positive outcome of the study. When selecting books of their choice at their own reading ability level, students entered their own comfort zone. Books were read successfully because of this understanding. Because project choices were varied and extensive, this gave students the opportunity to create more personal and relevant outcomes.

Recommendations in regard to student choice include providing ample book selections at a wide variety of reading ability levels in order to sustain interest throughout the year. Having weekly or monthly book talks to increase student awareness of genres is encouraged to maintain the motivation of students and broaden their scope of selections. Also, providing students with a sufficient amount of book project choices enhances creativity.

Student self assessment and reflection proved to be a beneficial component of the study. Students being given the opportunity to reflect on weekly reading goals and concepts learned in reading was a positive experience. Knowing there was weekly accountability in regard to what students learned in reading prompted students to remain on task during lessons and become actively involved contributors during lessons. As active participants, students were able to take control of their learning. Reading became more relevant to students. This relevance and understanding was shown in weekly journals and log books.

Teacher recommendations in this area include ample modeling of what self assessment is and its relevance to individual learning. Further recommendations in this area include keeping a class chart of what was learned in reading for the week. This helped students focus on the direction of their reflection when asked what they learned in reading for the week.

"Motivation has been defined as anything that gives direction and intensity to human behavior" (Sprague, 1995; Tomlinson, 1995 as cited in Palardy, 1999, p. 116). As a result, the research intervention strategies incorporated into each of the classrooms clearly increased student motivation in reading. Overall, students took a leadership role in the learning process, and as a result, became focused, insightful, and inspired readers.

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APPENDICIES

Appendix A

Teacher Questionnaire

Dear Faculty,

I am working on collecting research data about our school and faculty for my research project for my Master's Program. Would you please be able to provide the following information for me.

Circle One for each.

1. Male Female

2. White Black Hispanic Asian Native American

---

3. Age _____

4. Years of Teaching Experience (including this school year) _____

5. Check off any educational experience you have.

_____ Bachelor's Degree

_____ Master's Degree

_____ Doctorate Degree

Please return this to my mailbox as soon as possible.

Appendix B

Reading Motivation Survey

First Grade

Name: _____ Date: _____

Reading Motivation Survey

1. I like to be read to.
2. I like to read on my own.
3. I like to read real books.
4. I like to read make-believe books.
5. I like to read at home.
6. I like to read at school.
7. I read every day.
8. I understand what I read.

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Fourth Grade

Name: _____ Date: _____

Reading Motivation Survey

		AGREE	DISAGREE
I like to be read to.			
I like to read on my own.			
I like to read	fiction		
	nonfiction		
	mystery		
	biographies		
	science fiction		
	poetry		
	magazines		
	comic books		
I like to read at home.			
I like to read at school.			
I read every day.			
I understand what I read.			

Appendix C

Develpmental Reading Assessment (DRA)

DRA Observation Guide THE WAGON Level 14 1 of 2

Name _____ Grade _____ Teacher _____ Date _____

INTRODUCTION TO THE TEXT: PREVIEWING AND PREDICTING

T: Read the title and then say: *Kevin's two brothers and his sister used the same wagon for different things. Look at the pictures and tell me what is happening in this story.*

As the student previewed the pictures he/she gathered: ___ little ___ some ___ pertinent information

___ commented on each picture as a separate event ___ began to connect events ___ constructed a tentative story

T: Read the title again and then say: *Now read to find out how Kevin's brothers and sister fixed the dented, dirty wagon when it was his turn to have it.*

ORAL READING AND STRATEGIES USED

Take a running record as student reads.

Circle accuracy rate: Word Count 203

%	100	99	98	97	96	95	94	93	92	91	90	89
Miscues	0	1–3	4–5	6–7	8–9	10–11	12–13	14–15	16–17	18–19	20–21	22–23

Phrasing and fluency:

Read: ___ word by word ___ in short phrases ___ in longer phrases ___ punctuation

Reread for: ___ phrasing ___ punctuation

Intonation: ___ emerging ___ developing ___ generally effective

Reading rate: ___ slow ___ inconsistent ___ adequate ___ too fast ___ adjusted appropriately

At difficulty student:

Problem-solved using: ___ picture ___ rereading ___ letter/sound ___ letter/sound clusters ___ syllables ___ multiple attempts ___ pausing ___ no observable behaviors

Appealed for help: ___ often ___ sometimes ___ rarely ___ not at all

Number of words told/given by teacher: ___

Analysis of miscues:

Miscues interfered with meaning: ___ yes ___ sometimes ___ no

Self-corrected miscues that: ___ didn't make sense ___ didn't sound right ___ didn't look right

Comments:

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COMPREHENSION AND RESPONSE

Close the book before the retelling and then say:
T: *Tell me in your own words what happened in the story.*

Initial retelling included: ___ characters ___ important details ___ vocabulary/special phrases from story ___ setting ___ events in sequence ___ events out of sequence ___ ending

If initial retelling is incomplete, prompt:
T: *Tell me more.*

Added information about: ___ characters ___ important details ___ vocabulary/special phrases from story ___ setting ___ events ___ ending

Use these questions only if the following information was omitted from retelling:

T: *Who used the wagon, and what did they use it for?*

T: *What happened when it was Kevin's turn to have the wagon?*

Record other questions asked:

Response:

T: *Did you like this story? Why or why not?*

T: *What does this story make you think of?*

Student's responses required: ___ restating questions ___ other questions ___ prompts ___ no prompts

READING PREFERENCES

T: *Do you like to read* ___ alone ___ with a buddy ___ with a group? *Why?*

T: *When do you like to read? Why?*

T: *Where do you like to read? Why?*

T: *What is one of your favorite books? Why?*

Circle the statements on the Developmental Reading Continuum that describe the student's performance.

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Appendix D

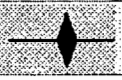
STAR Reading Test

Diagnostic Report

STAR Reading : Friday, 04/12/02, 03:33 PM
Test Date : 4/12/2002

Smith, Mary — **Teacher : Wykert, Tom**
Grade : 4 — **Class : 4Th Grade Copy**

This report presents diagnostic information about the student's general reading skills, based on the student's performance on a STAR Reading test.

SS	GE	PR	PR Range	Below Average . Average 50 Above Average	NCE	IRL	ZPD
559	5.2	61	44-75		55.9	4.6	3.8-5.3

This student's Grade Equivalent (GE) score is 5.2. His or her reading skills are therefore comparable to those of an average fifth grader after the second month of the school year. Mary also achieved a national Percentile Rank (PR) of 61. This score is in the average range and means that Mary scored equal to or higher than 61% of students nationally. The PR Range indicates that, if this student had taken the STAR Reading test numerous times, most of his or her scores would likely have fallen between 44 and 75. It reflects the amount of statistical variability in a student's PR score.

These scores indicate that Mary is probably learning to apply his or her reading skills to different academic areas. Mary likely uses textbooks and other nonfiction resources to achieve his or her content area goals.

Mary is also developing study skills to support his or her reading skills. He or she is learning to set a purpose for reading. He or she is also learning to use different skills when reading for pleasure and when reading for information. Also, Mary is beginning to apply pre-reading and post-reading strategies to increase his or her understanding of nonfiction text.

For optimal reading growth, Mary needs to:

* Maintain a minimum of 60 minutes of sustained silent reading daily
* Understand text structures for expository materials, especially textbooks
* Develop study skills to tackle content materials systematically
* Exhibit self-direction in reading assignments within a wide range of materials

This student's Zone of Proximal Development (ZPD) for independent fiction is 3.8 - 5.3. If Accelerated Reader(R) Reading Management Software is being used in your classroom or school, Mary should be *encouraged to select books with reading levels* in the ZPD . These books will provide optimal reading challenge without frustration. The ZPD, however, is approximate. Success at any reading level also depends on the student's interest and prior knowledge of a book's content.

The following techniques will also help ensure the student's continued growth in reading:

* Adjust the level of books read so that Mary maintains an average score of 85 percent or higher on Accelerated Reader Reading Practice quizzes.
* For nonfiction reading, reduce the level of books read by one-half to one full grade level.
* For read-aloud activities and paired reading, increase the level of books read by one to three grade levels.
* Use the Accelerated Reader At-Risk or Diagnostic Report and Student Record Report for more in-depth analysis of the student's reading ability.
* Teach Mary how to select books based on book reading level and point value.
* Help Mary establish a book reading level, minimum percent correct, and point goals for each week and marking period.
* Establish goals for reading progressively more difficult books.

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Appendix E

Teacher Observation Checklist

Teacher Observation Checklist of On/Off Task Behavior

	Monday		Tuesday		Wednesday		Thursday		Friday	
Name	**On**	**Off**	**On**	**Off**	**On**	**Off**	**On**	**Off**	**On**	**Off**

Appendix F

Weekly Student Self-Assessment in Reading

First Grade

Name: Date:

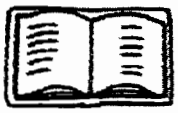
Self-Assessment

How I Did	
Reading	

My Plan to Improve

Listen.

Read at home.


Read during free time.

Slow down

Pay attention.

Ask questions.

Work with the group.

Ask for help.

Work quietly.

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Fourth Grade

Weekly Student Self-Assessment in Reading

Name _____ Date _____

1. In reading this week I learned ...

2. I would like some help with ... or time to work on ...

3. What I learned/read this week in reading made me think of ...

4. A goal I have in reading for next week is ...

Appendix G

Running Record

Name _____

Date 1-17 Title Ms Brown Word

Easy (95% and up) 100%

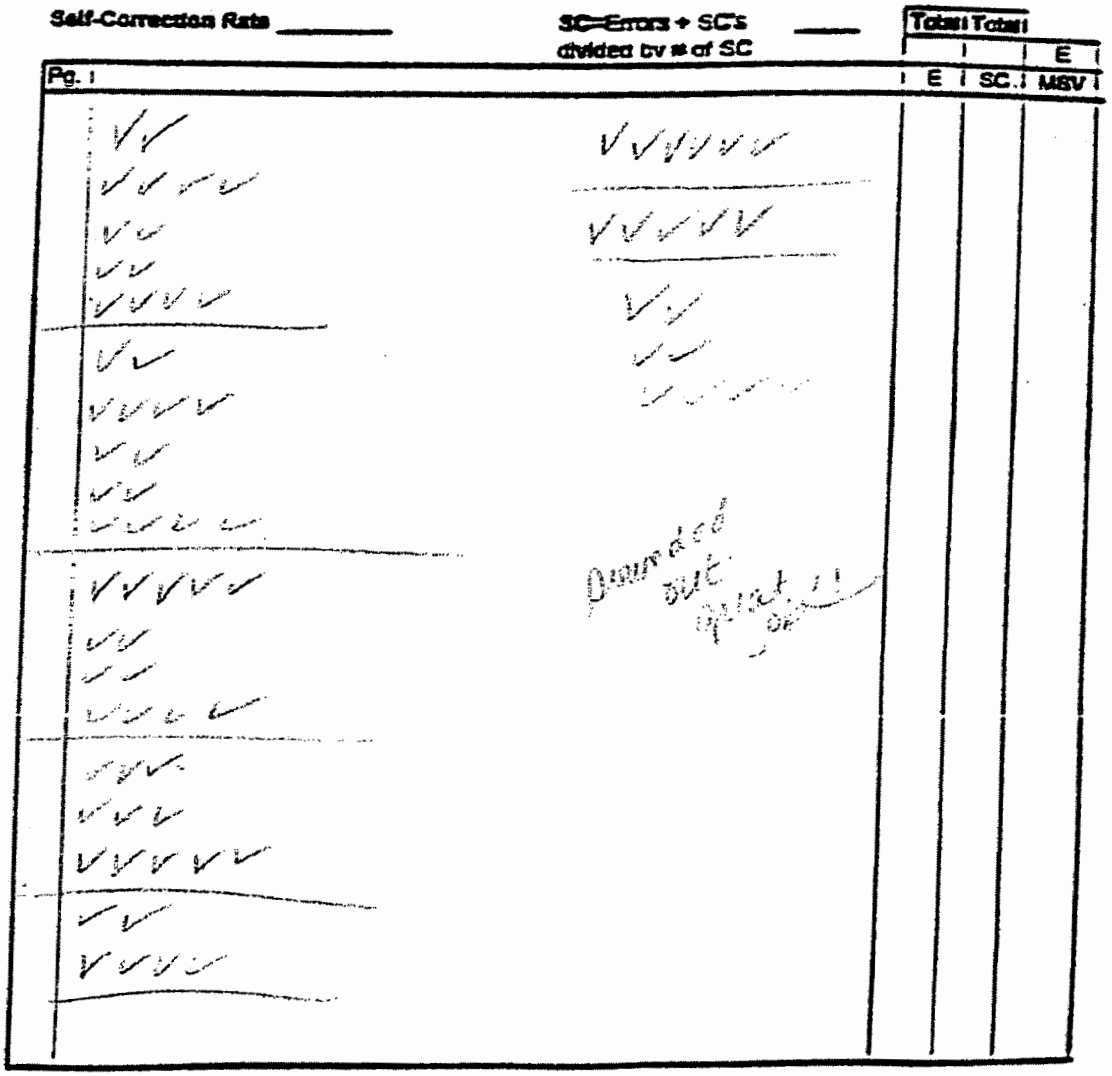
Instructional (90%-94%) _____

Hard (89% and below) _____

Self-Correction Rate _____

Level=# of Running Words divided by # of errors _____

SC=Errors + SCs divided by # of SC _____



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Appendix H

Rubric for Book Reports

RUBRIC FOR ASSESSING A BOOK REPORT

Name:_____ Date:_____

Title:_____ Category:_____

Author:_____

Written Report:_____ Project:_____

Type of Assessment: ☐ Self ☐ Peer ☐ Teacher

SCALE: CRITERIA:	0 Not Yet	1 School Newspaper	2 Chicago Tribune	3 Library of Congress
Content • Organized	No organization	Somewhat organized	I could outline it	Well planned out
• Creative	Lack of creativity	Shows signs of creativity	Good Creativity	Highly Creative
• Key ideas covered	No key ideas covered	1 key idea covered	2 or 3 key ideas covered	All key ideas covered
Mechanics • Spelling	5 or more mistakes	3 or 4 mistakes	1 or 2 mistakes	No mistakes
• Punctuation	5 or more mistakes	3 or 4 mistakes	1 or 2 mistakes	No mistakes
• Capitalization	5 or more mistakes	3 or 4 mistakes	1 or 2 mistakes	No mistakes
Delivery • Eye Contact	Reads Report	Looks at some people some of the time	Looks at some people all of the time	Looks at all of the people all of the time
• Volume	Could not be heard	Could be heard by people in front	Could be heard by most people	Could be heard clearly by all people
• Gestures	None	Used a few gestures	Used some gestures appropriately	Used many appropriate gestures well
Visual Aid • Graphics	None	Minimal	Colorful	Creative graphics that enhance book report
• Appeal	None	Little visual appeal	Captures our attention	Visually stimulates audience
• Relevance	None	Minimal relationship to topic	Relates specifically to topic	Relates and reinforces topic

Grade: A: 30-36 B: 23-29 C: 16-22 D: 9-15 Total: _____

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Appendix I

Invention Unit

UNIT PLAN USING MULTIPLE INTELLIGENCES GRID

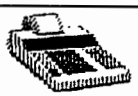
Unit: Inventions *Grade Level:* 4th Grade

Subject Area: Language *Timeline:* Five Weeks

Major Goals of Unit:

1. Comprehend a broad range of reading materials
2. Communicate ideas in writing to accomplish a variety of purposes
3. Speak effectively using language appropriate to the situation and audience

List four or five learning experiences/assessments under each intelligence.

Verbal/Linguistic	Logical/Mathematical	Visual/Spatial	Bodily/Kinesthetic
			
Read selections from unit: "A Piece of String is a Wonderful Thing," "The Invention of Sneakers," "The Doughnuts," and "Wings" Read "Danny Dunn and the Homework Machine" Read "Eureka! It's an Airplane" Debate the advantages and disadvantages of a specific invention. Write a poem about an invention.	Make a Timeline of Inventions over the past 100 years. Classify a list of inventions into logical groups and write a paragraph explaining your reasoning. Create a venn diagram to compare and contrast two inventions. Construct a question matrix on inventions.	Watch the video on Julie Lewis and write a summary of what she did. Create a cartoon story to describe a specific invention. Draw out the schematics for a specific invention. Make a video reenacting an important invention. Brainstorm about a specific invention using a web.	Act out an inventor explaining how they came up with their invention. Create a brand new invention and be able to explain its function and the process by which it was invented. Become an invention and act out its movements. Use Legos or K-nex or similar objects to build a model of an invention.

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Musical/Rhythmic	Interpersonal	Intrapersonal	Naturalist
Invent a new musical instrument and demonstrate its use. Write and perform a jingle or commercial promoting a new invention. Create an audio tape of the sounds of various inventions for the class to listen to and identify. Record and play music from the time an invention was made.	Do a KWL chart before you begin the unit. Interview an inventor. Discuss in small groups what inventions are most influential in your lives. Choose an invention to research and give an oral presentation with a partner.	Reflect on how we are influenced by certain inventions. Pretend you are a new invention and write about your birth into the world. Write a journal about how you would feel if someone stole your idea for an invention. Keep a daily diary as an inventor.	Take a field trip to the Museum of Science and Industry and give a report in front of your invention. Research the effect an invention may have on the environment. Investigate an invention that was created to be environmentally friendly like Julie Lewis's shoes. Create an invention that could help out a pet.

1. Whole-class learning experiences:	Read the selections from the unit	Make a timeline of inventions of last 100 years	Discuss in small groups inventions most influential	Keep a daily diary as an inventor
2. Whole-class assessments for learning experiences:	Teacher-made test	Rubric	Self-assessment	Rubric created by class
3. Culminating event for unit:	Field trip to the Museum of Science and Industry where each student will give an oral report on their invention when we get to it within the museum.			

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Appendix J

Weekly Reading Goal Sheet

First Grade

Name:

My Reading Goal

My goal is to read _____ books. Week of _____

Name of Book	Date	Parent Signature
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		
17.		
18.		
19.		

Did I meet my goal this week? Yes No

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Fourth Grade

Weekly Reading Goal Sheet Name.....
Date of Goal Setting.....

Name of Book	Author	Genre
.....	.....	.....
.....	.....	.....
.....	.....	.....

How many pages do you want to read from your book(s)?.....
.....
How will you show that you completed your book?
Taking an Accelerated Reader Test.....
Book Report..... Book Talk..... Project.....

Self- Reflection Date.....
Did you reach your goal(s)? Yes..... No.....
Why do you think you reached or did not reach your goal?.....
.....
How do you feel about how you did this week with your goal?.....
.....
What can you do next week to improve your reading performance?.....
.....
.....

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Appendix K

Parent Newsletter

NEWSLETTER

Publisher: Thielenhouse Volume No. 1 Issue No. 1 Date 10-2-02

READING UPDATES

Students have been very busy writing goals and reflections related to their independent reading at home and at school. On a weekly basis, students go to the library and select two books of their own choosing. They then set goals for themselves related to how much they want to read, and how they plan to show that they achieved their goals. Ask your son/daughter to show you his/her Reading Goals and Reflections Folder to see what he/she has been striving for.

For the month of September, students were to have read a minimum of two books. Your child read books. For the month of October, I would like all students to read a minimum of three books at their ability level. Reading at home on a nightly basis is a great habit to get into. Please encourage this with your child.

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