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ABSTRACT

Noting that developing self-motivated, empowered students is an ongoing challenge for teachers, administrators, and parents, this action research project sought to build intrinsic learners, using cooperative learning and multiple intelligences. Participating in the project were students of two third-grade regular division classes and sixth and eighth grade gifted classes. Student deficits in organizational skills and work ethic were documented by means of teacher observation, test scores, report card grades, and effort grades. The 18-week intervention was comprised of cooperative learning activities, introduction to multiple intelligences, and lessons integrating cooperative learning and multiple intelligences. Also used in the classroom were a positive discipline plan and the encouragement of study skills. To assess the effects of the intervention, pre- and post-intervention parent and student surveys were used as well as weekly teacher observations, checklists, grades, and individual student and teacher reflections. Survey findings revealed that students enjoyed cooperative learning activities more than other activities. The focus of the intervention with third graders was on developing social skills; those skills did not transfer beyond the actual cooperative group work. Parents noted that children spent less time on homework after the intervention but did not notice any impact on their children's work habits. Students reported increases in writing down their homework assignments, and preferences for working in cooperative groups, but no changes in doing their best on school work. Researchers noted an increase in completed homework. (Eight appendices include sample instructional materials and data collection instruments. Contains 41 references.) (KB)

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Empowering Intrinsic Learners

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Requirements of the Degree of Master of Arts in Teaching and Leadership

St. Xavier University & SkyLight Professional Development

Field Based Masters Program

Chicago, Illinois

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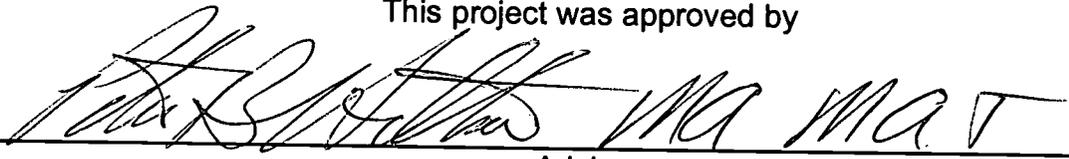
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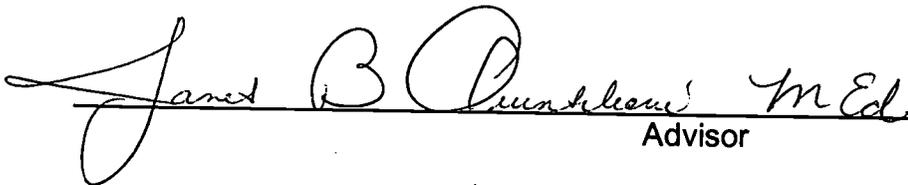
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CHAPTER 1

PROBLEM STATEMENT AND CONTEXT

General Statement of the Problem

The students of the two targeted 3rd grade regular division classes and the gifted 6th and 8th grade classes have shown tremendous deficits in organizational skills and in work ethic. A large percentage of them rarely work up to their potential, frequently doing only enough to “get by.” This is evidenced by teacher observation, test scores, report card grades, and effort grades.

Immediate Problem Context

Site A

School Description

The targeted elementary school is located in the same city as Site B. It sits in the heart of the city’s largest federal housing project. The three story brick structure stands out from the projects as one of the few buildings free of gang symbols and graffiti. This building is designated as a Title I School.

The building was constructed in 1901 with additions built in 1922 and again in 1949. Due to a growing community in 1959, a third addition was built to provide more classrooms. Numerous windows originally graced the building’s exterior. However, many were bricked over in the 1970’s to conserve energy, giving the school an appearance of isolation. The interior of the building was freshly painted in 1991. The walls throughout the school are filled with murals

illustrating storybook characters and other scenes. All of the hallways are colorful and decorated to warmly invite those who enter.

The total enrollment in the school is 476 students. The racial ethnic background is 93.7% Black and 6.3% White. Low-income students account for the total population. Student attendance rate is 92.9%, with the rate of mobility of the students at 53.3%. Chronic truancy is 11.8% for a total of 53 students. The average class size is 23 students at the kindergarten, first and third grade levels (School Report Card, 1997-98). The school serves pre-kindergarten through fourth grade students. The building houses two pre-kindergarten, five kindergarten, four first grade, four second grade, three third grade, and three fourth grade classrooms. In addition, there are four self-contained special education classes, one kindergarten special education inclusion class, one class of early childhood special education, and one special education resource class.

The school employs 65 people, 40 of whom are certified. Of the staff, 27 are classroom teachers with an average of 7.1 years of experience in the district. Five teachers have master's degrees and seven are currently enrolled in an advanced degree program. Other certified staff include: a physical education teacher, science teacher, part-time music teacher, part-time computer teacher, speech and language pathologist, and a resource teacher for children with learning disabilities. Additional support staff includes: a librarian, a Room of Discovery assistant, three Title I aides, four custodians, and six part-time cafeteria employees. Six teacher assistants provide support in the pre-kindergarten and special education classrooms. The office staff includes: a principal, one full-time and one part-time secretary, a home facilitator, and a Project Target employee. The school's pupil personnel services office is comprised of two school psychologists, two social workers, a nurse, and a secretary. One of the city's major

hospitals provides an in-school health facility. A full-time registered nurse, a physician's assistant, and a counselor are available to the students, families, and staff. The racial ethnic background of all employees at the school is 70.8% White, and 29.2% Black. Female employees account for 89.2% of the staff and 10.8 are male.

The school has 31 classrooms, a music room, and a science room. There are two computer labs. One lab services kindergarten and first grades, the other second through fourth grades. The school also has a library, two parent and teacher resource rooms, and a teacher's lounge. The large gymnasium has a stage at one end. Physical education classes are scheduled around the lunch hours because the gym also serves as the cafeteria. The site also has a Room of Discovery offering a variety of learning materials that provide meaningful and stimulating, hands-on, weekly experiences. The resource room has a multitude of learning materials including books, manipulatives, games, file folders and tapes. These items are available to teachers as well as parents for check out. The site also has an in-school postal system. This is overseen by a teacher and is fully operated by third and fourth graders. The students apply for postal jobs, interview, and are paid for the various positions. Also available at the school is a general education diploma program for adults. This is a federally funded program and provides childcare for the participants.

In addition to the many components of the building, the classrooms are well equipped with resource materials. Each room has two to four computers with one or two printers. Other technology equipment includes: two laptop computers, three laser disc players, several television and video cassette recorders, a video camera, a digital camera, and a computer scanner.

Many opportunities are provided to the students both for academics and enjoyment. Several community sponsors support these programs. Some involved groups include: the local

university, a nearby high school, The Boys' and Girls' Club, a girl scout troop, and the local cooperative extension office. Many teachers are also involved with after school activities such as music, drama and art club. Basketball is available through a team, which competes against a neighboring primary school. For student needing help academically, a reading program called Lightspan is offered, as well as tutoring in specific subject areas. The school's parent and teacher organization meets twice a month. Family nights are theme centered and provide parents with ideas and activities to do with their children. Dinner is usually served at these events.

Adopt-a-School program is another feature which fosters involvement. The local civic center provides free tickets to cultural events. The Kiwanis and labor council members volunteer monthly to read and listen to students read. These two organizations also provide numerous programs for the students. A local steel company sponsors field trips, which allow students the opportunity to see the importance of a good education in the working world. In addition to these Adopt-A-School partners, several members of the community volunteer their time to the school. The volunteers tutor students several times a week at all grade levels.

Community Description

The environment around the school is set apart from the city's businesses, medical services, cultural activities and shopping malls. Businesses within walking distance of the school are a beauty shop, liquor store, seasonal ice cream shop, and several taverns. A branch of the public library is housed across the street from the site. Public transportation is readily available to area residents and a bus stop is located in front of the school.

Site B

History of the Program

A five-year experimental program for the academically gifted began in 1963 between the local university, the public school district, the Catholic schools, and the Allied Foundation. At the end of the five-year experimental program, the Board of Education decided to continue the program and centralize it into one building. Since 1968, the gifted program for the entire school district has been housed in one building. In 1979, the school was moved from one building to another, but retained the same name.

All district fourth graders are considered to be candidates for this program. Fourth grade students are automatically referred to the gifted program by high standardized test results, and teacher recommendations, according to classroom achievement. These children are then sent to a local university for testing. The 60 children with the highest test results are recommended for entrance into the program. If the parents agree that the child should attend, he or she will then go through the gifted program for the next four years (middle school) until 8th grade advancement into high school. A list is kept of all children tested, and as vacancies open, the child at the top of the list is asked to attend. Finally, it is always the child's and parents' choice to make.

Because the students at this school are drawn from all over the entire city, there are more than the usual adjustments to middle school, which must be made. The children are no longer going to their "home" or neighborhood school, they have very few friends, they are being bussed to school, and, for the first time, 5th graders must change classes from one period to the next and keep all their belongings in a locker.

School Description

The building is a one-story brick building built in 1954 which features two staged gymnasiums, the smaller of the two serving as the cafeteria at lunchtime. An addition to the school was built in 1991 to add the second gymnasium, a science lab, a library, a band and

orchestra room, and to enlarge the office area. During the oil embargo of the 1970's, many of the windows were closed off to conserve energy. There is a garden near the entrance of the school, which was built and planted by the children, with the aid of one of our four Adopt-a-School partners, which won us the city-wide Orchid Award for beautification and improvement. The school is surrounded by a middle-class neighborhood and also has two large softball fields and a soccer field adjoining it. There are several businesses including a local newspaper, a seasonal ice cream shop, a couple of small strip malls, a grocery store, and fast-food restaurants within a three block radius.

The total enrollment of the school is 240 children; 60 in each grade, 5th through 8th, with three homerooms of grades five through seven, each numbering 20, and two homerooms of 8th grade, each numbering 30. There are, from time to time, slots which need to be filled caused by children moving or opting to go back to their home school. The racial ethnic background of these students is 86.6% White, 7.7% Asian, Pacific Islander, 4.5% Black, and 1.3 Hispanic. Low income students account for 6.7% of the total population and 0.4% are identified as being limited-English proficient. Chronic truancy is 0% with an over-all attendance rate of 96.2%. Mobility is 4.7 (School Report Card, 1998).

The school employs 15 people to provide instructional support to its students. All teachers are certified staff. Other certified staff include a speech and language pathologist who is there 3 times a week, a music teacher who is there two periods a day, a band teacher, an orchestra teacher, and a school psychologist who is in the building three days a week. The librarian is also a certified teacher and is there on a daily basis. The office staff includes a principal, one full-time secretary, and two part-time secretaries.

The results of the Illinois Goal Assessment Program, according to the 1998 District

Report Card are as follows:

	Reading		Math		Writing	
	%Meet	%Exceed	%Meet	%Exceed	%Meet	%Exceed
Grade 6	23	77	13	87	12	88
Grade 8	27	73	10	90	12	88

	Science		Social Studies	
	%Meet	%Exceed	%Meet	%Exceed
Grade 7	2	90		100

Many after-school activities provide the children with numerous opportunities for a variety of interests. The children may participate in the following organizations: Book Buddies, Chess Club, Choraliers, Drama Club, Environmental Club, French Club, Math Counts, Odyssey of the Mind Competition, Pep Club, Problem-Solving, Speech, Student Council, basketball, softball, and track athletic teams for both boys and girls, and volleyball for girls, as well as four cheerleading squads. Each club sponsored and led by at least one of the faculty members, with a considerable amount of help from many parents. Eighty-three percent of all students are involved in at least one after-school activity. Forty-one percent of all students are involved in a

school-sponsored athletic team. Only 54% of these children take the activity bus home after activities, which shows the capability and willingness on the part of the parents to encourage the students in many different areas.

The parents of the students at this school are generally very supportive. They are well-educated, (100% have high school diplomas, 65% are college graduates, and 50% have degrees beyond college.) The children are not only intelligent, but quite well-rounded with 37% of them taking private music dance lessons, 51% of them on an out-of-school athletic team of some sort (football, soccer, swimming, etc.) and 60% of the population of this school are in the school band or orchestra.

Site A and Site B

District and Community Description

Site A and Site B are part of a unit school district that includes thirteen middle schools, a magnet school, fourteen primary schools, and an early childhood center. The district employs 1042 teachers, 75.4% female, and 24.6% male. Ninety-two percent of the teachers are White, 7% are Black, 0.4 % are Hispanic, 0.4% are Asian, and 0% Native American. The teaching staff of the district averages 15.3 years of experience, with 49.5% having bachelor's degrees and 50.5 % holding a master's degree or above. The pupil-teacher ratio is 22:1 and the pupil-administrator ratio is 221:1. The district spends \$6492 per year to educate each student, and, on an average, pays \$38,725 to its teachers. The average salary for administrators is \$66,483 per year. The high school graduation rate is 72.2% and the average composite score of all students taking the ACT is 21.3 (School Report Card, 1998). The mid-western community this district serves is located 175 miles southwest of one of the largest metropolitan areas in the United States. It is adjacent to a major waterway and has a population of 112,900. Within the city is a

private university, one junior college, a vocational school, and one medical school. The health needs of the community and surrounding areas are met by three major hospitals, a mental health center, and a health education center which works closely with the school district to provide many programs.

There are many cultural opportunities throughout the area. The community supports a museum of arts and sciences and a planetarium that also provides programs for district schools. There is also a civic ballet, an opera company, a symphony orchestra, a municipal band, two theater groups and several private theaters, and a civic center theater and auditorium which brings in a variety of talents from the nation and the world. Both the private university and the junior college have many of these same cultural events to offer throughout the year.

The city is home to a large variety of sports for sports enthusiasts from two professional sports franchises to five park district golf courses, as well as many tennis courts, private tennis, golf, and swim clubs, a sports complex, an indoor ice skating ring, and 12,000 acres of parks. The park district offers many sports programs for both boys and girls, as well as many different kinds of lessons.

The area has its own daily newspaper as well as two smaller, weekly newspapers. There are also several radio stations and four local affiliates of the four major television stations. The city has interstate access and a regional airport.

The most recent census data states the per capita income in the city as \$14,039, and the median income in all households is \$26,074. Of all families with children under 18 years old, 25% live below the poverty level.

Site C

School Description

Site C is located in a residential area on the north side of a small community close to the community that surrounds Site A and B. The single story brick building, which is nearly 40 years old, includes 30 classrooms, two gymnasiums, one cafeteria, and a learning center, which serves both as a media center and a library. A primary school is attached to the junior high facility on the north side of the building. During the summer of 1999, the floor tile throughout the school was replaced due to the contents of asbestos and all of the lockers were also replaced, giving the school quite a facelift and a much brighter internal appearance.

Site C has a total enrollment of 457 students. The population is comprised of 98.2% White, 0.9% Hispanic, 0.9% Asian, 0% Black, and 0% Native American students. The low-income students are from families receiving public aid, living in institutions for neglected or delinquent children, being supported in foster homes with public funds, or eligible to receive free or reduced-priced lunches. Low-income students comprise 27.4% of the population. The attendance rate at Site C is 94.5%, the student mobility rate is 12.5%, and the chronic truancy rate is 2%. Average class size for Site C is 26.9 students.

The staff at Site C is 100% White. There are approximately 40 staff members, 24% male and 76% female. The teachers have an average of 12 years of teaching experience. Seventy percent of the staff population have bachelor's degrees and thirty percent have master's degrees. The school office staff is comprised of a principal, administrative intern, one secretary, and one clerk. There are thirty-four certified staff members who have direct involvement with thirty classrooms. These staff members include: classroom teachers, inclusion teachers, a learning center teacher, physical education, music, communications, and art instructors. There is also a full time gifted program coordinator as well as a school counselor and a school nurse.

Many after school activities provide the children with numerous opportunities for a variety of interests. The children may participate in the following organizations: chorus, marching band, Math Counts, Odyssey of the Mind, speech team, student council, basketball, track, cheerleading, and pompon squad. Each club is sponsored by and led by one or two faculty members with help from many supportive parents.

District and Community Description

Site C

The community's educational structure has a dual district school system, which consists of one high school district and one grade school district. The high school district serves grades nine through twelve. The targeted elementary district is pre-kindergarten through eighth grade. This district has a staff of over 300 members and approximately 4,000 students. The district is organized into ten schools. There are six buildings for kindergarten through grade three, two intermediate buildings for grades four through six and two junior high buildings for grades seven and eight. This district is nationally recognized for its use of technology in the classrooms, and was named "1977 Elementary Technology School District of the Year" by the National School Board Association.

The targeted community consists of approximately 35,000 people. The mid-western community that this district serves is located 165 miles southwest of one of the largest metropolitan areas in the United States and is located near a major river. Several manufacturing and service-oriented corporations, as well as a new federal correction facility impact the community. The community has a mall, library, local hospital, and park district.

Forty percent of the targeted population is within the low-income bracket. Employment in the community is comprised of service-oriented, manufacturing, skilled labor, and government

jobs. The unemployment rate of this community is 6.2%. The school is located in a neighborhood of single-family homes and multi-family dwellings. The neighborhood houses four churches. The area includes families of both lower-middle class and middle class socioeconomic status.

Community issues that are prevalent now are the high school dropout rate, school consolidation, and the issue of tax caps. Due to young mothers, single parents, grandparents raising grandchildren, and a poor home environment, a serious issue of concern is the additional need for early childhood programs. Economically, the business development sector of the community is striving to bring additional businesses to the area. The community is concerned about perceptions of racial intolerance and lack of sensitivity. An effort to deal with these perceptions is ongoing.

National Context of the Problem

For most students, early adolescence is a time of change and transition. These changes reflect a growing psychological and emotional independence from adults and a corresponding dependence on peer relationships to establish and maintain positive perceptions of the self. Children this age are in transition from concrete to abstract thinking. They are intensely curious, have a wide range of intellectual pursuits, and would rather learn by doing than by listening. They are in a new school environment, having advanced from primary to middle school, and have to develop new and meaningful relationships with peers.

Developing self-motivated, empowered students is an ongoing struggle for teachers, administrators, and parents, alike (Friedman, 1991). Recent studies have documented a decline in academic performance and motivation as students move from elementary to middle school (Anderman & Midgley, 1996). Research confirms that teachers, parents and national

commissions believe that motivation of adolescents is a critical issue. The prevailing attitude among student is that “getting by” is good enough (Leslie, 1998). Unfortunately, intrinsic motivation begins to drop off sharply around the same time that grades are becoming important as an evaluation device in a child’s education. This lack of motivation could have negative effects throughout the student’s life.

There are many factors that add to this problem of lack of self-motivation. Homework, for middle school-aged children and older, is critical to academic success. Homework teaches children the value of self-discipline, delayed gratification, and independent learning. However, 50% of students fail to do the homework assigned to them. This is often due to poorly designed homework assignments. Well-designed homework reinforces what is being learned at school, and inspires students to study a topic at greater depth. This newly-acquired knowledge can then be applied (Quilter, 1996).

According to Sharlene K. Johnson, grades will improve as self-confidence improves and self-confidence will improve as learning and inquiry improves. It takes parental involvement, commitment on the part of the child, and willingness on the part of the teacher (*Ladies’ Home Journal*, Sept. 1998).

Parents also play an important part in motivation. However, the tendency for parents to do their children’s homework in order for the child to get a good grade is all too prevalent. When parents get too involved in their children’s homework, they are helping their children learn the wrong things. Grades matter, but it’s more important for children to learn responsibility, self-reliance, perseverance, priority-setting and time management. Teamwork and cooperation among, parent, child, and teacher is of the utmost importance (Rosemond, 1995).

Students need to take pleasure not only in the achievement, but also in the effort. A willingness to work is found almost universally in the best students. A seventeen year study of Illinois valedictorians found that success relied less on native intelligence than on effort, and that children learn best by having parents who show, through their own behavior, that persistence pays off. Parents who look upon mistakes as an opportunity to learn to do something better, are also teaching their children to persevere and question, and that hard work will pay off (Wallis, Claudia, 1998).

Students need to be motivated intrinsically (undertaking an activity for the enjoyment, learning, or the feeling of accomplishment). Intrinsic learners tend to use strategies that demand more effort and process information more deeply. They think more logically, have better decision-making skills, and they also tend to prefer tasks that are more challenging. An extrinsically motivated student performs for the reward or to avoid punishment. Extrinsic learners tend to choose tasks which are of a low degree of difficulty, rather than challenging and tend to put forth the minimal amount of effort necessary to get the maximal reward.

Obviously, the goal of every parent, teacher, and school should be to build intrinsic, motivated learners. Motivation to learn is stimulated most directly through modeling, communicating of expectations, and direct instruction by both teachers and parents. This effort is an investment into the children and the future, the payoff being students who value learning for the sake of learning, not just for the acquisition of a grade (Lumsden, 1994).

CHAPTER 2

PROBLEM DOCUMENTATION

In order to document and assess the multiple intelligences, learning interests, and work habits of the targeted third, sixth, and eighth graders, several assessment instruments were administered to all classes. Site A consisted of two third grade classes, Site B consisted of one sixth grade class, and Site C consisted of one eighth grade class.

The initial assessments were given or done over a two-week period at the beginning of the new school year at all three sites. The first survey was sent home for parents to complete (Appendix A). This survey questioned the parents not only about their child's work habits, but also about the importance of homework and studying at home. The surveys for Site B and Site C were identical. The survey for Site A was more simply worded due to cultural and educational backgrounds of the parents. The children were then given a student survey (Appendix B) to find out their opinions about work done at school, the homework they were required to do, and what type of classroom work they preferred. The students were also given a researcher-developed multiple intelligences test (Appendix C) so that the children could be placed in well-rounded cooperative learning groups. A teacher observation checklist was developed by the researchers (Appendix D) to aid in the ongoing documentation of classroom behaviors. The results of these surveys are given on the following pages in Figures 1 through 17.

Figures 1 through 4 illustrate how the parents responded to the separate questions on the survey sent home to them before the research project began. Figure 1 represents the question, “Would it be helpful to you if your child would write his homework assignments in a notebook to see and sign every night?” for Site A. “Yes, Sometimes, and No” were the answer selections provided. The question, “How often do you check your child’s assignment notebook?” was asked of Site B and C parents, with the answer selections being “Yes, Sometimes, and Never.” The difference in the actual questions between the two surveys was that Sites B and C already had assignment notebooks in place, and Site A had never used assignment notebooks. Both Site A and B parents responded favorably, 97% and 83% respectively, about checking assignment notebooks. Site C parents checked assignment notebooks 57% of the time.

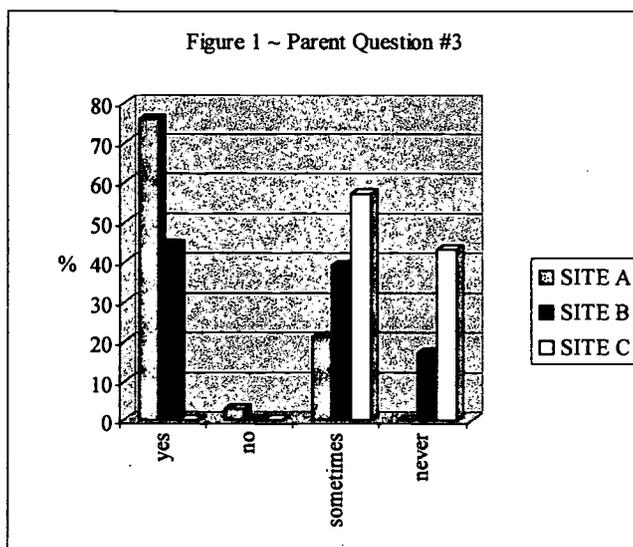


Figure 2 shows responses to the question, “Do you think homework teaches responsibility?” for Site A and the question, “How important do you think homework is to teaching your child responsibility and work ethic?” was asked of Site B and C parents. Approximately 70% of parents at all sites were in agreement that homework does teach responsibility.

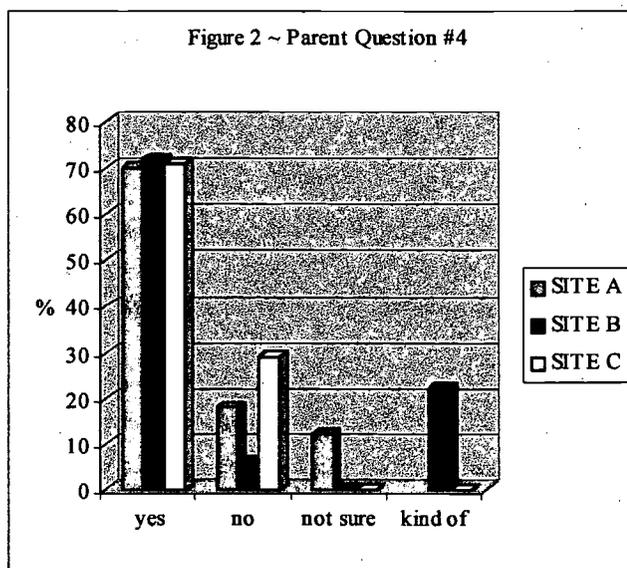


Figure 3 represents the question, “How much time does your child spend on homework every week?” Site A responses were 50% for 0 – 1 hour, 34% for 2-3 hours, 17% for 4-5 hours, and 0% for no time at all. The Site B responses were 11% for 0-1 hour, 62% for 2-3 hours, 17% for 4-5 hours and 10% for no time at all. Site C responses were 8% for 0-1 hour, 35% for 2-3 hours, 21% for 4-5 hours and 35% for no time at all. The differences in the amount of homework time on a weekly basis is probably due to Site A being a primary grade, and Sites B and C being both middle schools.

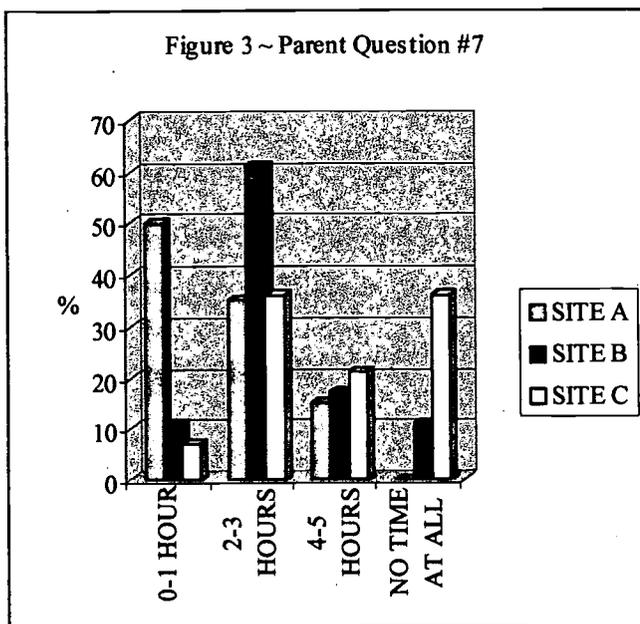
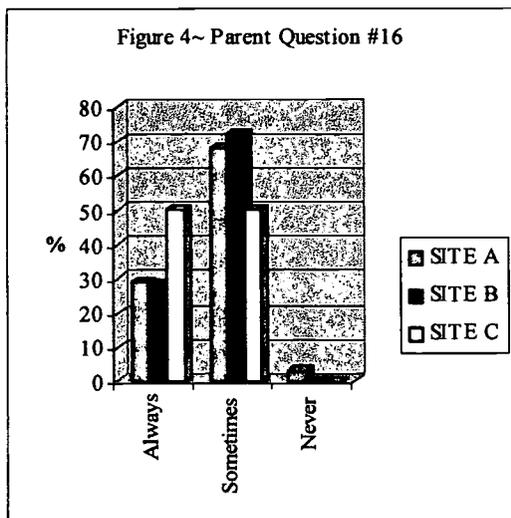


Figure 4 show responses to the question, “Do you think your child works up to his potential?” Site A and B parents were evenly distributed between their children always, 30%, and sometimes, 70%, working to their full potential. Fifty percent of Site C parents felt that their children always worked to their full potential and fifty percent of them felt that their children sometimes worked to their full potential.



Figures 5 through 13 illustrate how the children responded to the pre-research survey questions. Figure 5 represents the question, “Do you write down your assignments?” Students at Site A responded with 56% “yes,” 20% “no,” and 24% “sometimes.” Site B responded 67% “yes,” 0% “no,” and 33% “sometimes.” Site C responded with 35% “yes,” 12% “no,” and 53% “sometimes.” Due to classroom observations, the researchers at Sites A and C did not agree with the survey responses.

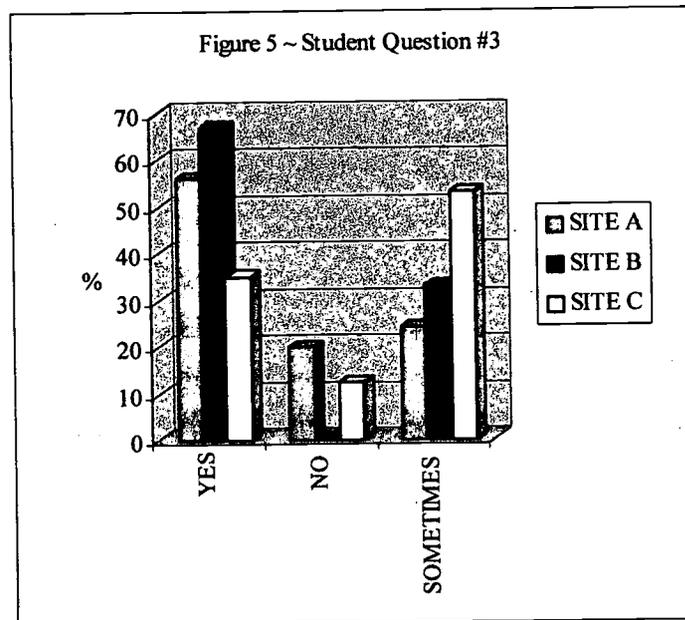


Figure 6 represents the question, “How important is homework to you?” The majority of the children at Sites A, B, and C felt that homework was “somewhat” or “very important,” 76%, 88%, and 95%, respectively.

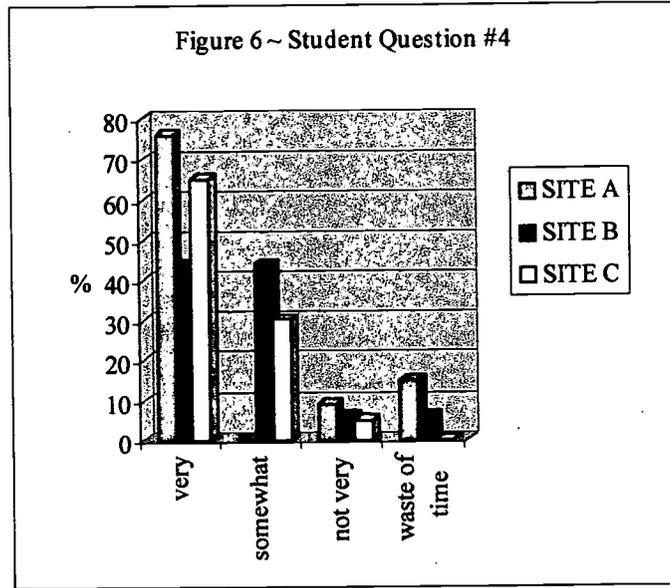


Figure 7 shows response to the question, “How much time do you spend on homework every week?” The majority of the children at Sites A, B, and C responded that they spent three hours or less on studying, 74%, 90%, and 76% respectively.

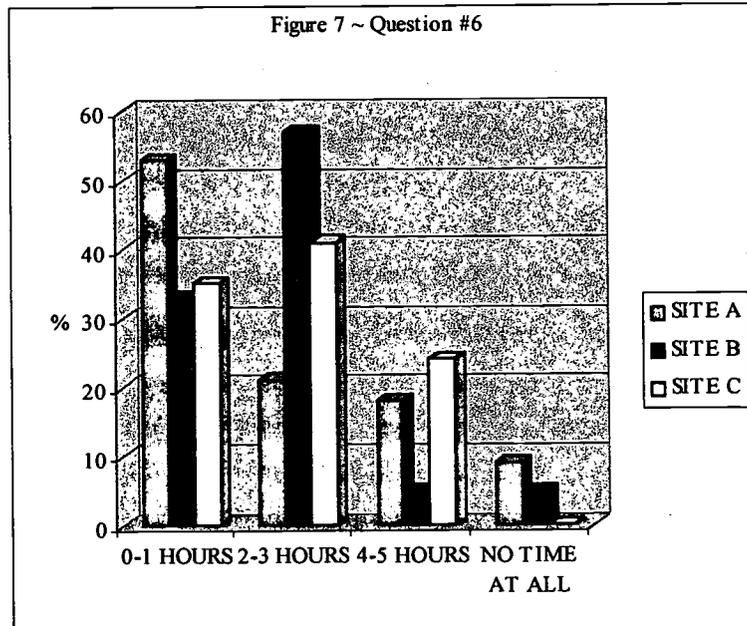


Figure 8 represents the question, "How often do you do your homework?" Practically one hundred percent of all the children at all three sites said they did their homework most or all of the time, but again, the researchers did not agree with this generality.

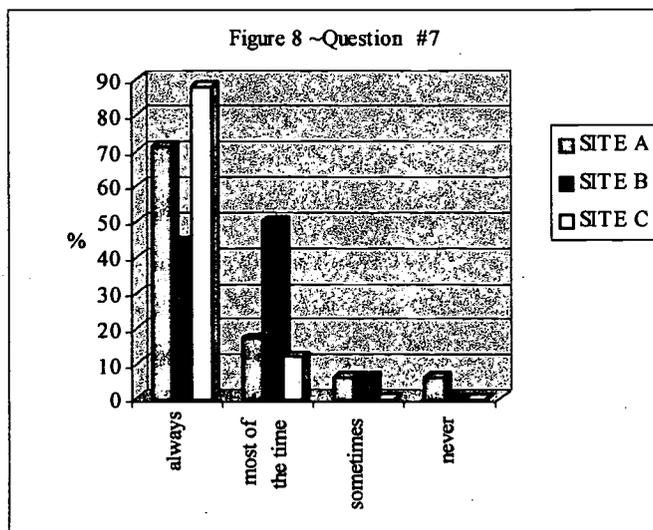
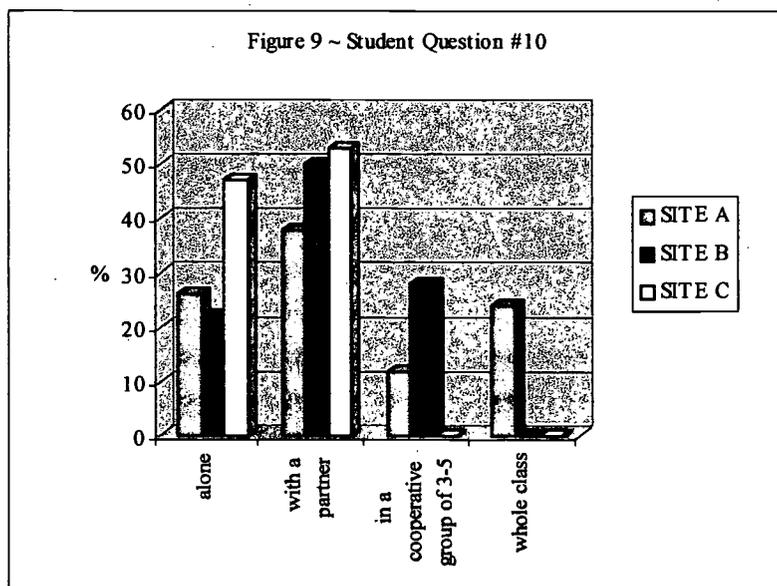


Figure 9 shows response to the question, "How do you like to work on assignments or projects?" Students at Site A responded with 26% preferring to work alone, 38% liking to work with a partner, 12% liking to work in cooperative groups, and 24% preferring to work with the



whole class. Site B responded with 22% preferring to work alone, 50% liking to work with a partner, 28 % liking to work in cooperative groups, and 0% preferring to work with the whole class. Site C responded with 47% preferring to work alone, 53% liking to work with a partner, and 0% for both working in cooperative groups and as a whole class.

Figure 10 represents the question, “What do you like most about school work?” Site A responded with 6% liking discussions, 40% liking projects and activities, 11% liking cooperative learning, 32% liking homework, and 11% liking tests or quizzes. Site B responded with 14% liking discussions, 42% liking projects and activities, 35% liking cooperative learning, 6% liking homework, and 3% liking tests or quizzes. Site C responded with 82% liking discussions, 71% liking projects and activities, 0% liking cooperative learning, 5% liking homework, and 12% liking tests or quizzes.

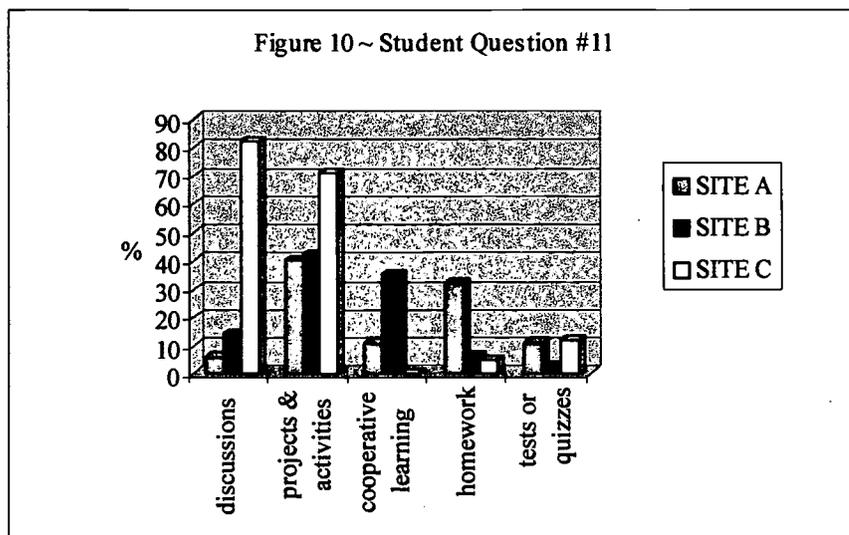


Figure 11 shows responses to the question, "What type of assignment is your favorite?" Site A responded with 49% preferring group projects, 12% preferring individual projects, 21% preferring worksheets, and 18% preferring to read and answer questions. Site B responded with 55% preferring group projects, 6% preferring individual projects, 33% preferring worksheets, and 6% preferring to read and answer questions. Site C responded with 29% preferring group projects, 35% preferring individual projects, 24% preferring worksheets, and 12% preferring to read and answer questions.

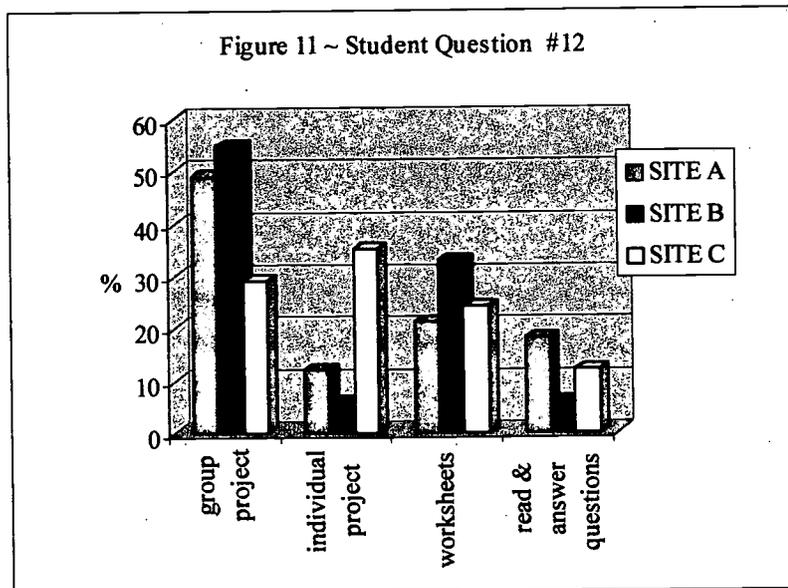
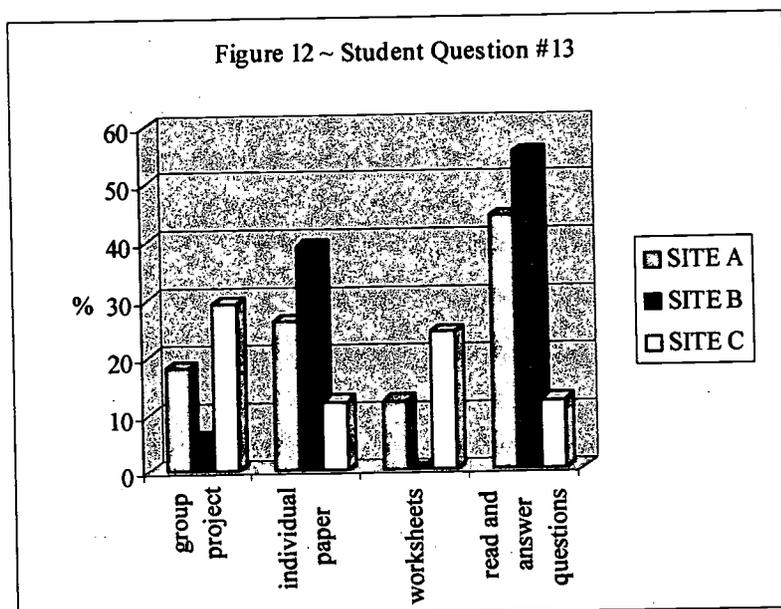


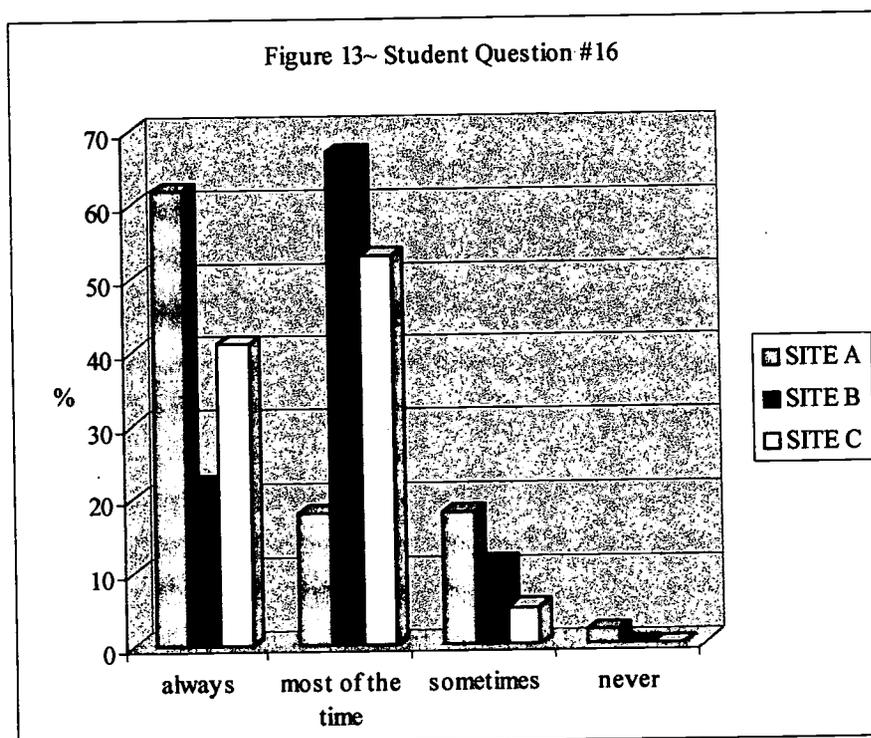
Figure 12 represent the question, "What type of assignment is your least favorite?" Site A responded with 18% choosing group projects, 26% choosing individual papers, 12% choosing worksheets, and 44% choosing to read and answer questions as their least favorite types of assignments. Site B responded with 6% choosing group projects, 39% choosing individual papers, 0% choosing worksheets, and 55% choosing to read, and answer questions as their least favorite types of assignments. Site C responded with 29% choosing group projects, 12%

choosing individual papers, 24% choosing worksheets, and 35% choosing to read and answer



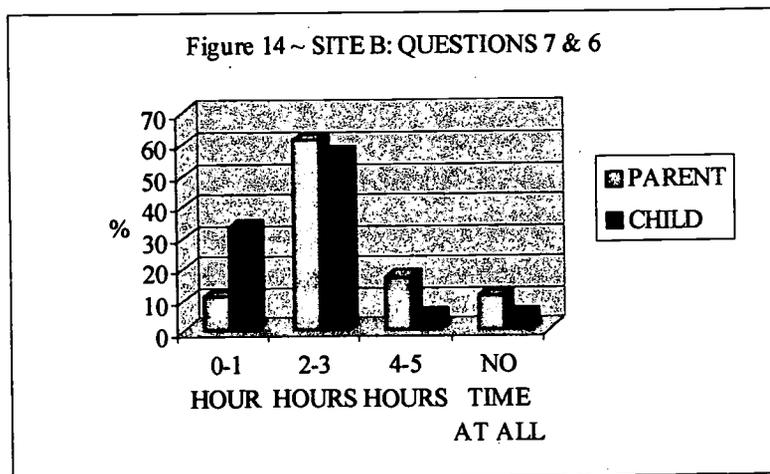
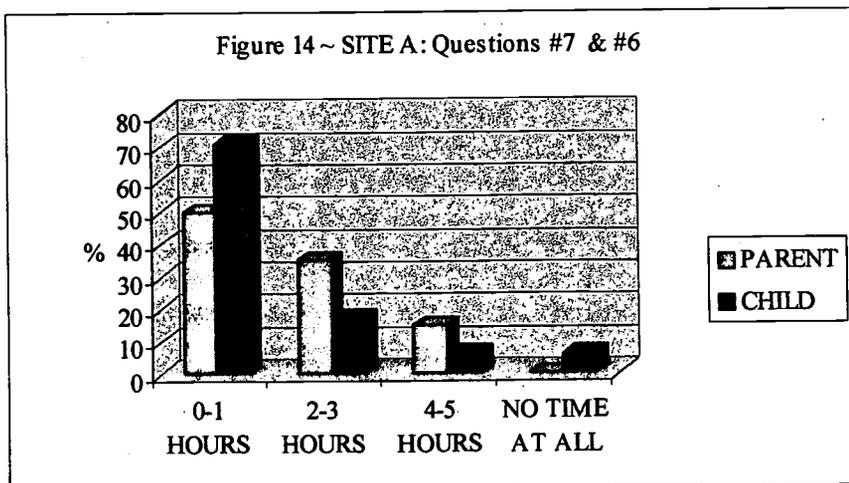
questions as their least favorite types of assignments.

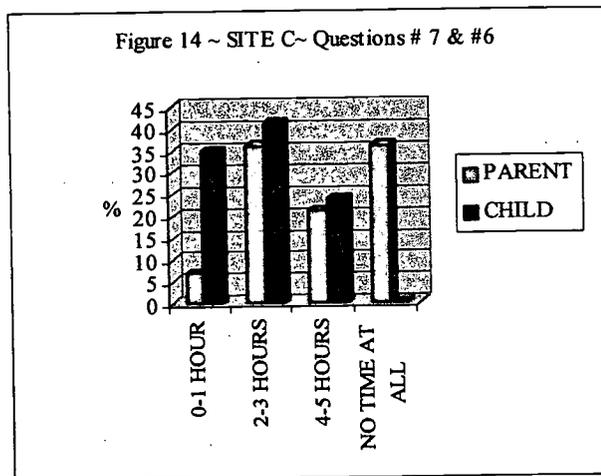
Figure 13 shows responses to the question, "How often do you do your very best on your school work?" The students at Sites A, B, and C, felt that they always or most of the time did



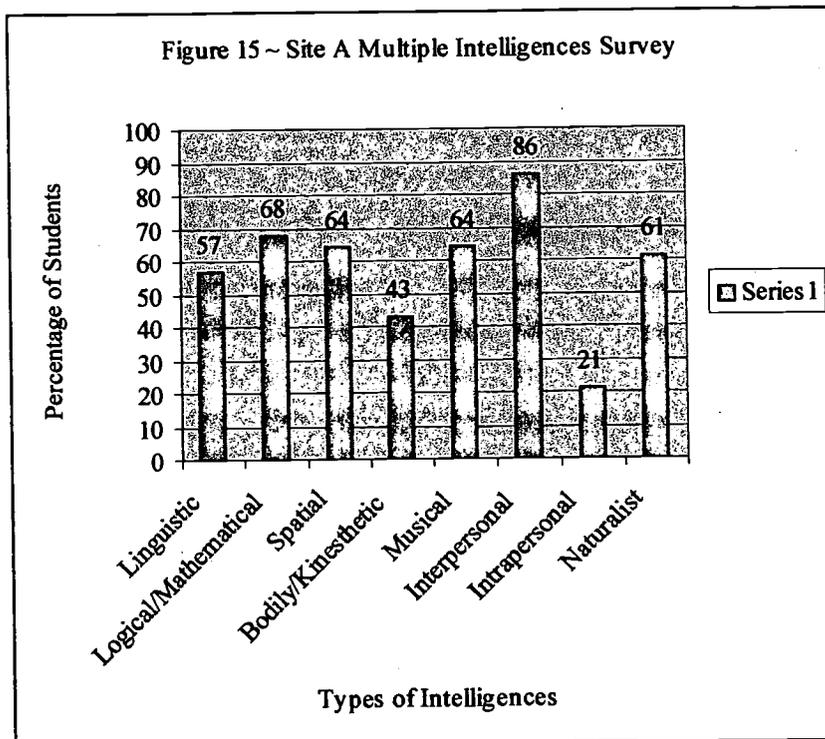
their very best on school work, 80%, 89% and 94% respectively.

Figure 14 shows a comparison of the answers to the same question between the parents and the children at each site. Question 7 on the parent’s survey was “How much time does your child spend on homework each week?” Question 6 on the student survey was “How much time do you spend on homework every week?” At Site A, the highest response for both parents and students was 0 – 1 hours per week. At Site B, the highest response for both parents and students was 2-3 hours per week. The only large discrepancy between the opinions of the parents and the students appears at Site C, where parents and students did not agree upon the amount of time spent on homework per week. None of the children admitted that they spent no time at all studying each week while 36 percent of the parents felt that their child did no studying during the week.

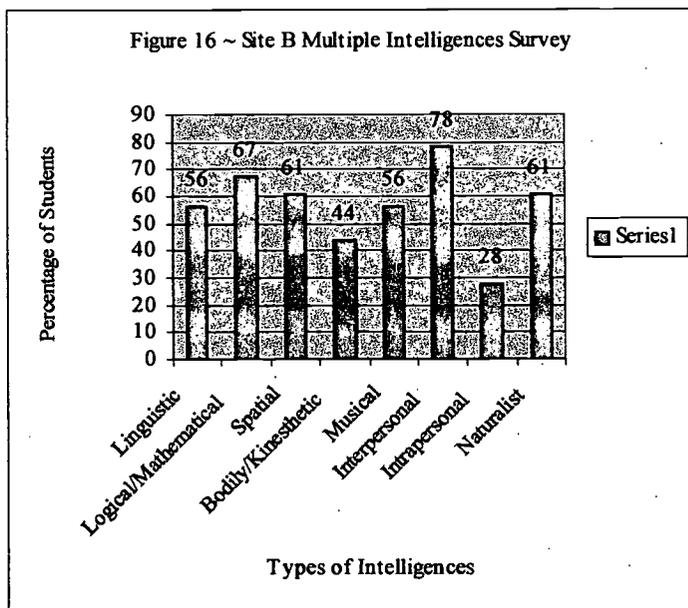




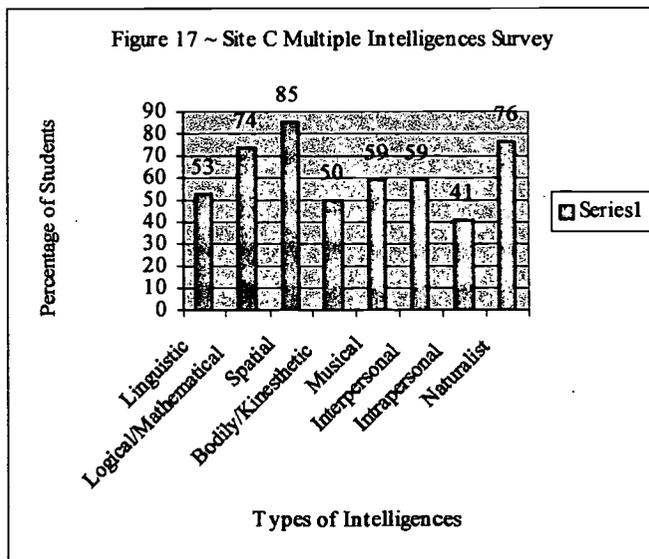
The researchers developed a multiple intelligences survey which was given at all three sights. The two preferred intelligences for each child are reflected in the survey results. Figure 15 demonstrates how the preferred multiple intelligences were divided among the children at Site A. Site A is the two third grade regular division classes. All eight multiple intelligences are represented within Site A, with interpersonal being the most preferred and intrapersonal being the least preferred.



The results of the Multiple Intelligences Survey for Site B are shown in Figure 16. Site B is a sixth grade classroom of gifted students. The highest percentage of chosen intelligences is interpersonal and the lowest is intrapersonal..



The results of the Multiple Intelligences Survey for Site C are shown in Figure 17. Site C is an eighth grade classroom for gifted students.



The highest intelligence was Visual/Spatial and the lowest was Intrapersonal. The children at all three sites were placed into cooperative learning groups according to their dominant multiple intelligences in order to have an even distribution of intelligences within each group.

Probable Causes

Because of the differences in the populations at the three different sites, the researchers feel that the probable causes of lack of motivation need to be addressed for each sight. Site A children are elementary age and because of their socio-economic backgrounds, have very different expectations for school than do the children at the other two sites. The children at Site A look to school as a place that is safe and secure. Their parents generally have a limited amount of education and don't take much interest nor have many expectations for their children concerning school. Many children are much more concerned with immediate needs such as food, clothing and shelter than they are with receiving good grades and doing their best.

Sites B and C children are of middle school age and are gifted. It is the opinion of the researchers that the fact that the children are gifted is a large part of the reason the children are not inclined to do their best. Until this point in their education, the children have all been included in regular classrooms. They have always been considered to be at the top of the class and have not had to work exceptionally hard to do excellent work in comparison to the rest of the children in the classroom. Now, however, the children have been placed in gifted classrooms where everyone works at an even level. For the first time the children are truly being challenged. These children are not used to having to work hard. Intrinsic motivation has really never been

necessary because the children have always received excellent grades on whatever they turned in because their work was so much better than that of the rest of the class. Now, in order to maintain being “the best” these children are going to have to really work and they are simply not used to doing that.

“Teaching is a hard job when students make an effort to learn. It is an impossible one when students make no effort to learn.” (Ford, Alber & Heward, 1998, p.33). In education, the absence of student motivation is a persistent problem. Teachers consistently voice concerns regarding poor student motivation and its effect on student achievement (Rinne, 1998; Anderman & Young, 1993). According to Newmann, (as cited in Ford, Alber, & Heward, 1998, p. 28), “The most pressing and persistent issue for students and teachers is not low achievement, but student engagement. Students attend class but with little excitement, commitment, and pride in mastering the curriculum. They have no psychological investment in learning.” American students admit that they are not putting forth complete effort to learn the subject matter and, as a result, are working to only a fraction of their potential (MacIver & Reuman, 1993). Rothman’s 1990 study, sponsored by the National Center for Educational Statistics, (as cited in Hootstein, 1994), revealed that too many students believe that school work is boring . Other studies have found that increasing numbers of students merely sit in classrooms and cut themselves off from the flow of information (Hootstein; as cited in Schroeder, 1999). One of the reasons for this is the fear of failure. Students tend to put forth minimal effort if they do not feel confident about completing a task. Negative feelings about the task can trigger additional stress and apprehension which stifle any attempt to perform successfully (Schroeder, 1999). Literature reviewed has shown that problems currently existing in our schools on a national level revolve around three key entities: motivation, student, and teacher (Parish, 1999). If the teacher does not

make the material interesting or valuable to the student, the student will have little or no motivation to learn. (Martino, 1993) When the student sees little or no relevance in schoolwork, there is little or no desire to complete the work and a negative attitude toward school may result (Anderman & Maehr, 1994; Eisner, 1999; Lumsden, 1994).

Students continually search for ways in which material makes sense in their day-to-day lives, becoming frustrated when they do not see any relevance, therefore, concluding that the subject matter is unimportant and not worthy of effort. (The Institute for the Learning Sciences, 1994). Students are more likely to become engaged in tasks when they feel they are doing important work and often equate hard work with satisfaction and success (Ames, 1990). They respond negatively to skill and drill learning, work with little thought involved, and work with no clear practical application (Wasserstein, 1995; White, 1997). When students cannot stay focused, they do not stay on task and sometimes become disruptive to the class or exhibit other undesired behaviors (Ornstein, 1995).

The problems of our nation's schools are primarily motivational. Therefore, the understanding of motivation should be the basis for implementing changes. Instead of focusing on the identified problems of a few students, developing a learning situation beneficial to most students would be more valuable (Anderman & Maehr, 1994; Palardy, 1997).

According to Raffini, the sources to which children attribute their successes and failures (effort, ability, luck, or level of task difficulty) are very important to how they approach and cope with learning situations. The students' perceived purpose for doing a task is a major factor in the level and quality of engagement they put into the task (Anderman & Maehr, 1994). Since students feel they do not have a meaningful connection to their learning, they are not motivated to do their work (Oldfather, 1993). Traditionally, teachers do not share control and

responsibility with students because teachers do not wish to relinquish power. A decline in motivation and interest in the subject area occurs when students have few chances to participate in decision making and the opportunity to make choices (Eccles, Wigfield, Midgley, Reuman, MacIver, & Feldlaufer, 1993; Ornstein, 1996). These researchers agree with Terrell Bell, former secretary of the U.S. Department of Education, (as cited in Ford, Alber, and Heward, 1998), who said, "There are three important things to remember about education. The first one is motivation, the second is motivation, and the third is motivation."

CHAPTER 3

THE SOLUTION STRATEGY

Literature Review

There are many theories about why students lack motivation. After reviewing educational literature, the researchers have considered several methods before constructing an intervention plan for empowering intrinsic learners. The strategies addressed in this chapter include: developing organizational skills, implementing cooperative learning, teaching to multiple intelligences, allowing students to make choices in how and what they are going to learn, and encouraging positive classroom behaviors.

Developing organizational skills is the first strategy students need in order to meet their potential. Showing students early in life how to organize themselves and their work is the first step toward the process. Simple and structured routines that are set in place will consistently lead to good organizational skills. Because students do not function well in a chaotic environment, they need structure and routine (Burke, 1992). Lack of organization leads to frustration and causes the students to turn their backs on learning. According to O'Brien, students need to be taught skills such as: listening, note taking, and time management (Natale, 1996). Using procedures such as assignment notebooks, conduct charts which check for on-task behavior, as well as prompt and accurate assignment completion, are ways of getting activities

done (Evertson & Harris, 1991). Procedures need to be effective and consistent. These procedures also lead students to exhibit responsible behavior and build cooperation.

In the business community, employees work together. People spend time together socially; and yet, children are asked to work alone in a classroom on a regular basis. Most literature reviewed suggests that cooperative learning is an effective method of teaching social skills. As cited in *If Minds Matter Volume II*, (Costa, Bellanca, & Fogarty, 1992), Johnson and Johnson's cooperative learning model is a strategy that enhances learning. According to Deutsch (1992), "Cooperation is working together to accomplish shared goals. In cooperative situations, the goal attainments of participants are positively correlated; individuals perceive that they can reach their goals if and only if the other group members also do so." (p. 193) Cooperative learning is a successful teaching strategy in which small teams use a variety of learning activities to improve their understanding of a subject. Each member of a team is responsible not only for learning what is taught, but also for helping teammates learn, thus creating an atmosphere of achievement (Balkcom, 1992). When students process information through peer interactions, they gain a deeper understanding of the material (MacIver & Reuman, 1993-94).

Learning groups can utilize several techniques in order to enhance learning and encourage participation of all members. Using a variety of methods is desirable. Rolheiser-Bennett's research (as cited in Costa, Bellanca, & Fogarty, 1992) reports that most teachers commonly employ only one instructional strategy; recitation. Unfortunately, things have not changed much since 1945 within the American classroom. Despite a steady increase of alternative ways to involve students in learning, as well as the need for those alternatives, teacher-centered instruction appears to remain as prevalent as ever (Goodlad, 1984; Doyle, 1986,

as cited in Costa, Bellanca, & Fogarty, 1992). Students are provided with opportunities for social interaction, hands-on experiences, and physical movement, which many teachers believe can be a motivational strategy provided by cooperative learning groups (Hootstein, 1994).

Studies have consistently found that cooperative learning promotes increased academic achievement and is easy and inexpensive to implement (Lyman & Foyle, 1989). Ames found (as cited in Schunk & Cutshall, 1997) when group members share success, individual self-esteem rises, which in turn, enhances motivation. Cooperative groupings can convey to students that they are competent because members share in a group's success. Feelings of competence sustain motivation.

The 21st Century trend, working toward interpersonal interaction, shows that society itself is shifting from self-orientation to group orientation. Learning to interact and cooperate with others will be a key to success not only in school, but also later in life. Cooperative learning provides peer bonding in the classroom. The need for people to relate constructively with peers from multicultural and varied socio-economic groups will become more and more important during the upcoming century. Because the children of today live in a world that is ever-changing, as far as the people in their lives are concerned, they need to learn how to cooperate with a large variety of people. The school must train the children of this generation to prepare for their roles as adults in the business world of tomorrow. Cooperative learning is very effective for teaching social values and skills, peer bonding, and achieving academic cognitive goals. A caring, cooperative learning environment is essential to promoting intrinsic motivation (Brandt, 1995). Rather than the singular use of direct instruction, it is better to get students involved in activities, group problem-solving exercises, and helping to decide what to do and how to do it. The use of cooperative learning groups can benefit students by reducing the stress

of working alone on assignments and providing help and encouragement for weaker students from stronger students (Harris, 1991).

Today's students are different. Because of interactive television and technology, students have a different way of learning: hands-on technology, and physical and multi-sensory interaction. They are used to simultaneous seeing, hearing, and doing while learning. O'Brien suggests that schools try to make lessons more exciting, taking into account that children's brains today are different. Their brains are wired for stimulation, and are able to take more sensory input. It is vital that schools provide many opportunities for success (Natale, 1996).

Every child is unique and enters school with a variety of intelligences. Teachers need to provide opportunities to stimulate all students' learning styles (Faggella & Horowitz, 1990). If the multiple intelligences, as defined by Gardner, can be taught to, teachers will ensure that all students will have strategies which capitalize upon their stronger or preferred intelligences. Howard Gardner, a professor at the Harvard Graduate School of Education, first proposed this theory in 1983 in his book, *Frames of Mind*. The data from Gardner's research yield evidence for at least eight discreet domains of human achievement, those domains being: visual/spatial, musical/rhythmic, bodily/kinesthetic, interpersonal, intrapersonal, verbal/ linguistic, mathematical/logical, and naturalist. The eighth domain was introduced by Gardner in 1995 (Chapman, 1993, revised edition).

Gardner based his findings on work done from neurology, developmental and cognitive psychology, and anthropology. His work supports the notion that the brain processes with both the right brain and the left brain simultaneously in many complex ways. Even though the eight intelligences are independent of one another, they do work together. Everyone does possess all eight intelligences, but at various levels of strength (Collins, 1998).

The multiple intelligences play a key role when students are choosing projects of interest to them. Projects which compliment their learning style are more likely to produce an interest in learning. “When learning styles are accommodated, teachers will see improved attitudes toward learning and an increase in productivity, academic achievement, and creativity” (White, 1997).

According to author Csikszentmihalyi, as cited in Chapman, (1993) “motivation is the most important by-product of the varied curriculum. When students are encouraged to expand their strengths, they are more likely to enjoy their work and to pursue increased competence with confidence.” Structuring lessons using the multiple intelligences helps teachers to respond to each student’s needs.

While most research is in favor of the multiple intelligences theory, there are some doubts about the trend. There is no firm research showing the effectiveness of using multiple intelligences in the classroom. Some researchers believe that using the intelligences in the classroom can be a waste of time, emphasize less important skills, and lead to a false sense of learning. On the other hand, cognitive psychologists, along with educational researchers, find value in teaching through the use of multiple intelligences. This enhances teachers’ understanding and appreciation of various talents which students bring to the classroom (Collins, 1998).

Giving students choices is a fundamental of good teaching. A teacher will have the best opportunity to extend choices to the students by using a variety of teaching methods. Constructive choices might include choosing which book to read, which research materials to use, which graphic organizer works best, which character to analyze, or what product to make. According to Armstrong (1994), allowing students to make choices enables them to make decisions about their learning experiences.

Making choices is like lifting weights. The more frequently students choose from a group of options, the thicker their 'responsibility muscles' become." Choices may be small and limited, ("You may choose to do either the even problems or the odd problems") or they can be significant and open-ended, ("Select the project you would like to do this nine-weeks"). Choices may be related to content, ("Which of the following topics would you like to research?") informal and spur-of-the-moment, ("Should we stop now or keep going?") or carefully planned and highly structured, ("Your project will need to follow this rubric") (p. 57).

Students will usually tend to choose projects that closely relate to their preferred intelligence, therefore allowing them to work in a way that is of high interest to them and within their strongest capability.

Young children seem to be driven by curiosity, a need to explore, interact with, and make sense of their surroundings. Unfortunately, as children grow older, their desire for learning often seems to decrease (Raffini, 1993). It is up to educators to rekindle this inner desire to learn.

There are basically two types of motivation: intrinsic and extrinsic. Intrinsic motivation is the stimulation or desire to learn, coming from oneself. A student who is intrinsically motivated engages in an activity for the enjoyment that it provides, the learning that it allows, or the feelings of accomplishment that it produces. Extrinsic motivation is the encouragement from an outside force. A student who is extrinsically motivated performs in order to avoid some kind of punishment or to obtain some reward such as grades, stickers, or teacher/parent approval (Lepper, 1988). Rewards are contingent on completing the task and cause numerous problems

such as: producing temporary changes in students, reducing intrinsic interest, and controlling the students with rewards that usually do not relate to the task. (Ryan & Deci, 1996). As stated in *Punished by Rewards*, “ ‘Do this and you’ll get that’ makes people focus on the ‘that,’ not the ‘this.’ Do rewards motivate people? Absolutely. They motivate people to get rewards” (Kohn, 1993, p. 67). The potential outcome of having students value learning for its own sake is priceless. It is critical for teachers and parents to devote themselves to encourage, develop, and maintain students’ motivation to learn. If students are to become lifelong learners, they must become responsible for their own learning. Teachers cannot simply transmit facts, skills, and concepts, but rather must emphasize self-discipline and learning strategies. In a classroom environment where students are allowed to make choices about how and what they are going to learn, they will be motivated to learn now and for their lifetimes (Schunk & Cutshall, 1997); therefore, developing intrinsic motivation will be the focus of this action research project.

Project Objectives

As a result of a program to empower intrinsic learners, during the period from September, 1999, to January, 2000, the targeted classes will improve: organizational skills; motivation; and work ethic, as measured by parent and student surveys; teacher observation checklists; academic assessments and student self-assessments. In order to accomplish the project objectives, the following processes are necessary:

1. Lessons that involve cooperative learning activities will be developed and implemented in the classroom.
2. Lessons that involve introducing the children to the eight multiple intelligences will be developed and implemented in the classroom.

3. Lessons that integrate cooperative learning and the eight multiple intelligences will be developed and implemented in the classroom.

Project Action Plan

The following action plan will be incorporated into the classrooms, using a combination of cooperative learning, multiple intelligences, student choices, and intrinsic rewards which help to provide a positive environment for learning.

- I. Week One - Survey parents and students on study habits and interests
- II. Week Two - Lessons that involve cooperative learning activities will be developed and implemented in the classroom.
 - A. Teacher-assigned cooperative learning groups
 - B. Bonding activities
 - C. Social skills
 - D. Group roles-class discussions of importance and thorough description of roles
- III. Week Three-Introduction of multiple intelligences
 - A. Multiple intelligences survey of students
 - B. Multiple intelligences activities
 1. H.O.T.S. (higher order thinking skills)
 2. Graphic Organizers
 3. Think-pair-share
 4. Songs, cheers, raps, poems
 5. Posters, charts, graphics pictures
 6. Overhead projector, chalkboard

- IV. Weeks five through nine- Integration of multiple intelligences and cooperative learning
 - A. Projects utilizing cooperative learning and the multiple intelligences
 - B. Teacher assessment
 - 1. Checklists
 - 2. Reflective journals
 - 3. Grades
 - C. Student assessment
 - 1. Individual
 - 2. Group
 - D. Student reflection
- V. Weeks Ten through Eighteen
 - A. New grading period
 - B. New cooperative learning groups
 - C. Continuation of interventions from first nine week grading period

Methods of Assessment

In order to assess the effects of the intervention, pre- and post-parent and student surveys were developed and implemented. In addition, weekly teacher observation checklists, grades, and individual student and teacher reflections will be kept throughout the intervention.

CHAPTER 4

PROJECT RESULTS

Historical Description of the Intervention

This research project was designed to empower students to be intrinsically motivated to learn. A variety of strategies for developing organizational skills, implementing cooperative learning, teaching to the multiple intelligences, allowing students to make choices in how and what they are learning, and encouraging positive classroom behavior were selected to achieve the desired effects. The intervention began in September, 1999, and continued through January, 2000, at which time the second set of surveys were taken and the second set of graphs were made. Due to the complexity of the problem of lack of motivation and the many obstacles students confront on a daily basis, the intervention is ongoing.

In the beginning of the fall of 1999, students at sites A, B, & C were given a variety of assessment instruments. This was done in the form of Parent Surveys (Appendix A), and Student Surveys (Appendix B), as well as a Multiple Intelligences Survey (Appendix C). Due to the history of the mobility at Site A, (approximately 53%), base groups were constantly changing, while the groups at Sites B and C remained constant throughout the intervention.

At the beginning of the intervention, the students were given a variety of team building-cooperative learning activities focusing on bonding activities, social skills, and group roles. Due to the age and socio-economic background of the third graders at Site A, the researchers at Site A decided they needed to concentrate on social skills. The children at Site A changed base groups more frequently, while the children at Sites B and C remained in the same learning groups for a nine-week grading period and then were regrouped for the second grading period. The children were placed into groups according to the results of the multiple intelligences survey. Each group included a variety of the children's preferred intelligences. Group bonding activities were used approximately every two weeks and then again at the beginning of the second grading period when the new groups were formed (Appendix D). The problem with cooperation became immediately obvious when the initial surveys were analyzed and it was discovered that 0% of the children at Site A enjoyed cooperative learning activities. It is interesting to note, however, that although the children at Site A had 0% interest in cooperative learning, their highest multiple intelligence preference on the MI survey was interpersonal. Researchers at Site A feel that this was due to a lack of understanding of the terminology "cooperative learning." After the cooperative learning groups were organized, it was observed that many of the students seemed unwilling to listen to one another's ideas, and certainly could not accept or try one another's ideas. As a result of concentrating on social skills, other parts of the original intervention plan were given less emphasis and in some cases omitted at Site A. The fact that the children did not interact well in group work was supported by the multiple intelligences survey results which showed that the children enjoyed interpersonal activities. The researchers felt that this was all a part of the extreme lack of social skills in the children at Site A.

Cooperative learning activities that allowed making choices were offered at all three sites. Choice-making, such as choosing one of three different activities, or choosing a type of activity the group wanted to do, provided the students with the ability to not only choose different activities, but to encourage choice-making skills, which also strongly relates to social skills.

Multiple intelligences activities which would compliment the learning styles of the students were integrated into the cooperative learning activities, incorporating the use of the following: higher order thinking skills, graphic organizers, think-pair-share, songs, cheers, raps, and poems. Because of the high percentage of Logical/Mathematical and Visual/Spatial preferences at Sites B and C, activities offering choices related to poster and chart making, sequencing, graphic organizers and the use of analogies were employed as often as possible. Even though there was a low percentage of Intrapersonal and Bodily/Kinesthetic preferences at Sites B and C, activities offering choices such as personal reflection journals, and some independent activities were presented in the hopes that these would be developed. This integration of multiple intelligences and cooperative learning activities was used not only for the duration of the intervention, but continues to be the primary method of teaching within all three sites. Student reflection on individual projects, as well as on how the group members were functioning within the group, was done on a consistent basis, at the end of each group project (Appendix E).

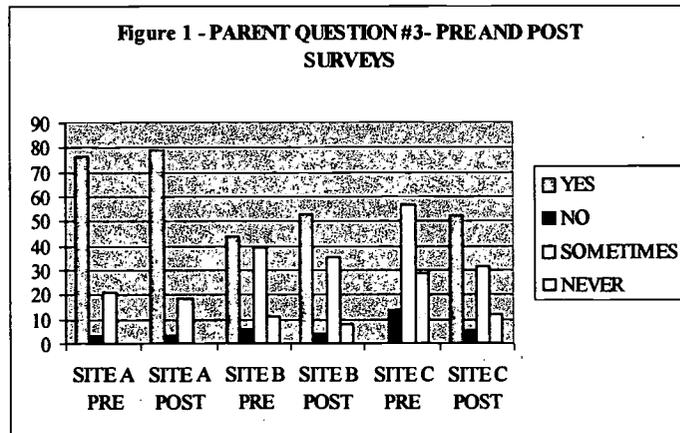
As a method of encouraging organizational skills, that also coincides with study skills, assignment notebooks and weekly Behavior/Conduct charts (Appendix F) were implemented in all three sites. The use of assignment notebooks encouraged the students to record each assignment. Assignments not handed in were kept track of on the teacher's

weekly behavior checklist. By the end of the research time, a large percentage of the children, particularly at Sites B and C, automatically got their assignment notebooks out so that they could write their assignments down in them. Approximately one month into the intervention plan, the teachers at Site A had decided that their children were too young for an ongoing assignment notebook and instead used teacher-made weekly assignment sheets (Appendix G). These weekly assignment sheets were easier for the children to handle and less costly to replace, as the children tended to lose the assignment notebooks. The researchers at all three sites felt that assignments were more consistently handed in by the end of the intervention than they had been at the beginning.

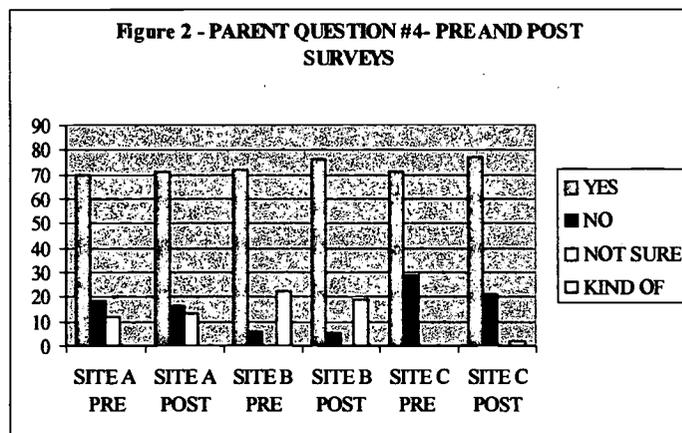
Another form of teacher assessment at all three sites was the use of reflective journals. These were reflected in as often as possible, on a weekly basis at the very least (Appendix G).

Presentation and Analysis of Results

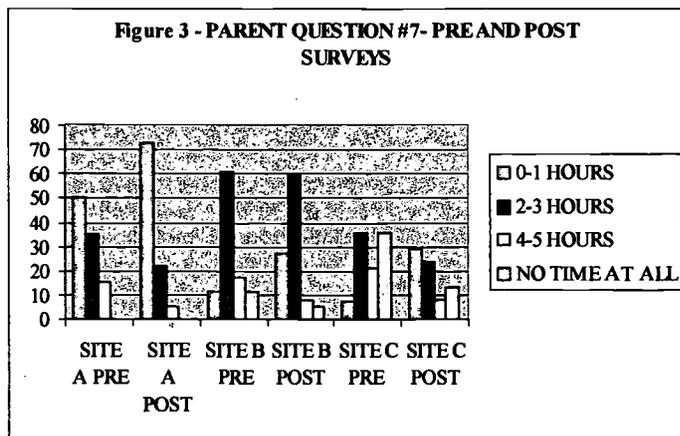
Post-intervention surveys were conducted at the conclusion of the intervention. Both the parent and student surveys were identical to those sent at the beginning. The students at Sites B and C remained the same. Because of the high mobility rate at Site A, the students at Site A were continually changing, therefore, the statistics at the end cannot accurately be compared to the statistics at the beginning.



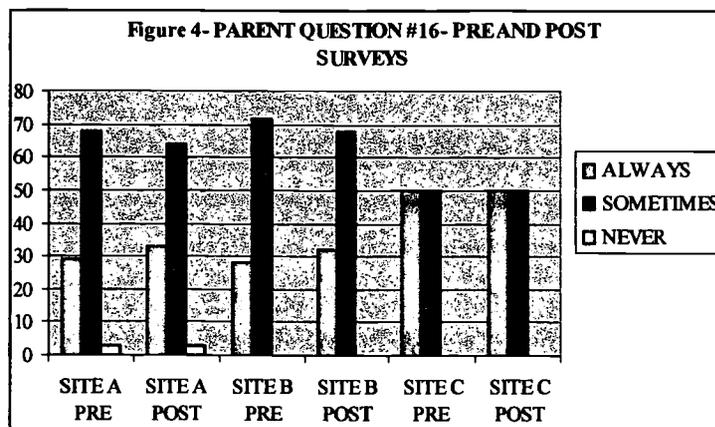
In answer to the question, “Do you check your child’s assignment notebook?,” the parent opinions at both Sites A and B stayed basically the same. The parents at Site C, however, began to check assignment notebooks, primarily due to teacher request at Back to School Night, and the result of the question rose from 0% to 52% for checking students’ assignment notebooks on a daily basis.



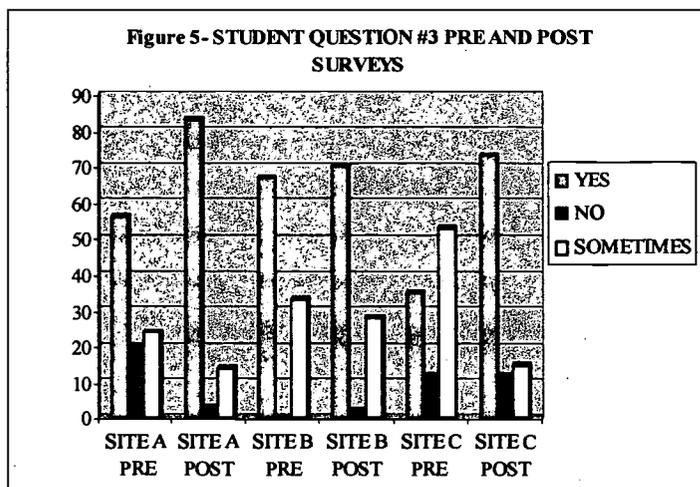
In answer to the question, “How important do you think homework is to teaching your child responsibility and work ethic?,” the parental opinions at all three sites remained approximately the same for each response on both surveys.



In response to the question, “Approximately how much time does your child spend on homework each week?” parents at all three sites concluded that their children were spending less time on homework. Researchers feel that this is due to the use of more cooperative learning activities and work done at school rather than independent work designed to be done at home. The researchers at Site B felt that the students at that site were still doing 2 –3 hours of homework a week due to the departmentalization of classes and the different styles of teaching of the other teachers who the students had. When students were asked how much time they spent on researcher B’s homework, the answers were considerably lower.



For the question “Do you think your child works up to his potential?” (Figure 4), the parents’ answers remained almost identical at all three sites. The researchers feel that this is due to the short time span of the intervention as well as the fact that teaching style does not have much to do with the way the parents perceive their children’s work habits.



Figures 5 through 13 illustrate how the children responded to both the pre-intervention and post-intervention survey questions. Figure 5 responds to the question “Do you write down your assignments?” All three sites showed an increase to the “yes” response. Site A showed a 27% increase, Site B showed a 3% increase, and Site C showed a 38% increase.

Site A responded with a 17% decrease to the “no” response and a 10% decrease to “sometimes.” Site B responded with a 2% increase to the “no” response and a 5% decrease to “sometimes.” Site C results remained the same for the “no” response and had a decrease of 38% to “sometimes.”

The graph shows that due to the intervention plan, many students at Sites A and C began writing their assignments, and continue to do so. Site B did not show a significant increase because the students had used assignment notebooks the previous year.

Figure 6 shows responses to the question “How important is homework to you?” The majority of students at all three sites felt that homework was “very” or “somewhat important,” 94%, 100%, and 96% respectively. Site A showed an 18% increase, Site B, 12% and Site C, 1%.

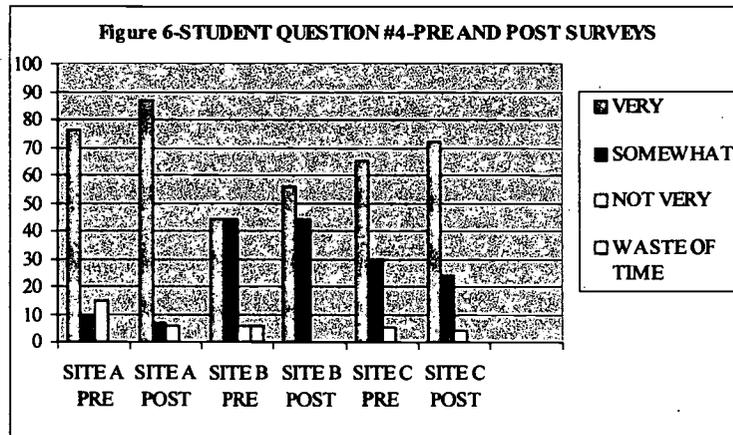


Figure 7 shows responses to the question “How much time do you spend on homework every week?” Sites A, B, and C responded on the post-survey that they spend three hours or less on homework, 86%, 99%, and 84% respectively. Sites A and C also showed an increase in spending “no time at all” on homework. The researchers felt that this was due to the intervention of cooperative learning activities and time management skills.

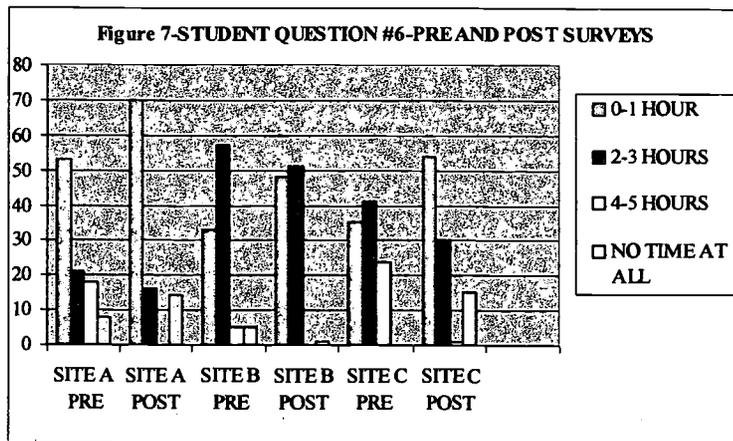


Figure 8 shows responses to the question, “How often do you do your homework?” Nearly 100% of all the students at all three sites said they did do their homework. These results are the same as those found on the pre-intervention survey. Researchers did not feel that the first results were valid because the students were not turning in their homework according to homework charts and grade books. By the end of the intervention researchers noticed a significant increase in returned homework.

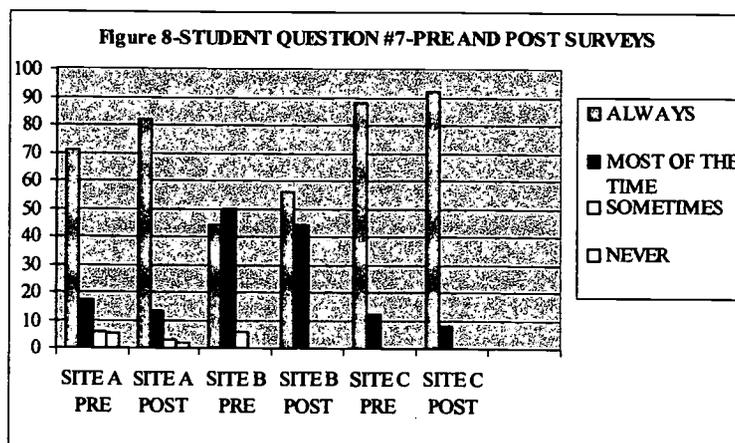


Figure 9 shows responses to “How do you like to work on assignments or projects?” Students at Site A responded with an 11% decrease preferring to work alone, a 6% increase liking to work with a partner, a 29% increase of liking to work in cooperative groups, and a 12% decrease preferring to work with the whole class. These results show the researchers that due to the intervention plan, their students enjoy working in cooperative groups or with a partner more so than working with the whole class or alone.

Site B students responded with a 10% decrease preferring to work alone, 5% decrease liking to work with a partner, 9% increase liking to work in cooperative groups, and 6% increase preferring to work with the whole class. The gifted sixth graders would rather work with a partner or in a group provided that each group member does his share of the work.

Site C students showed a 45% decrease in working alone, an 18% decrease in liking to work with a partner, 54% increase in cooperative groups, and 9% increase in working as a whole class. The researcher felt that this was due to the fact that most of the students had never really consistently worked in cooperative groups previous to the intervention.

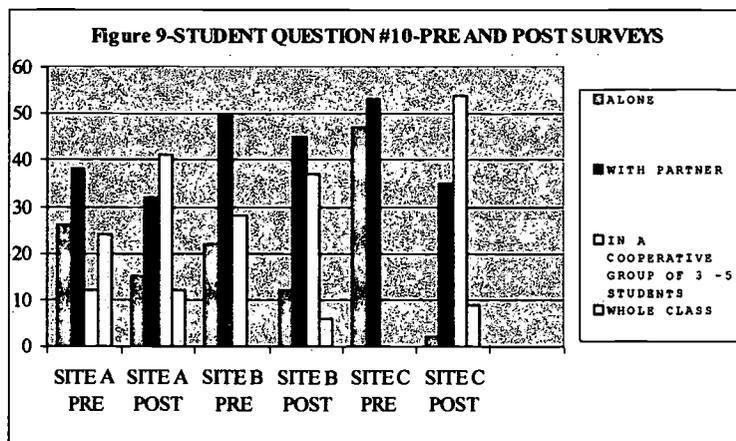


Figure 10 shows responses to the questions, “What do you like most about schoolwork?” The post survey showed an increase in students preferring discussions, projects, activities, and cooperative learning with a decrease in preferences to homework, tests and quizzes. The largest increase from the pre to post intervention survey was found in cooperative learning.

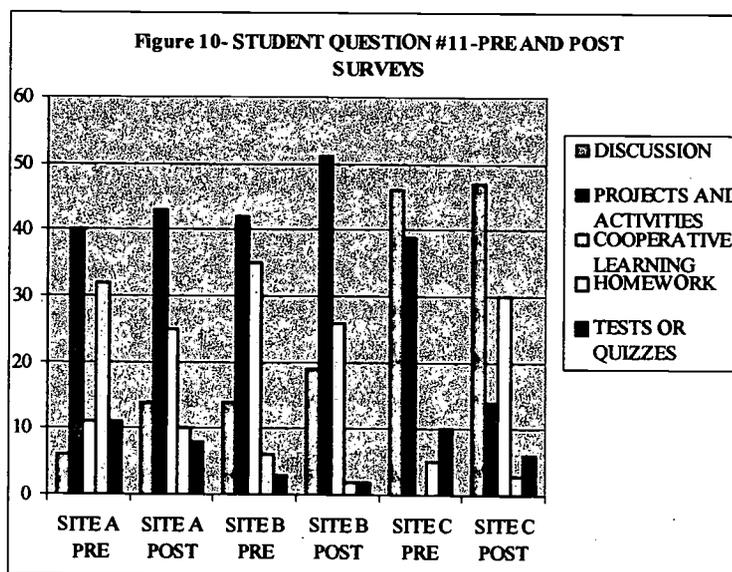


Figure 11 responds to the question, “What type of assignment is your favorite?” The results show that students at all three sites prefer to do group and individual projects more than worksheets and answering questions. Site C had the largest percentage difference, showing a 32% increase in group project preference. The researcher at Site C felt that this was primarily due to the fact that the students had never done many cooperative learning activities previous to the intervention.

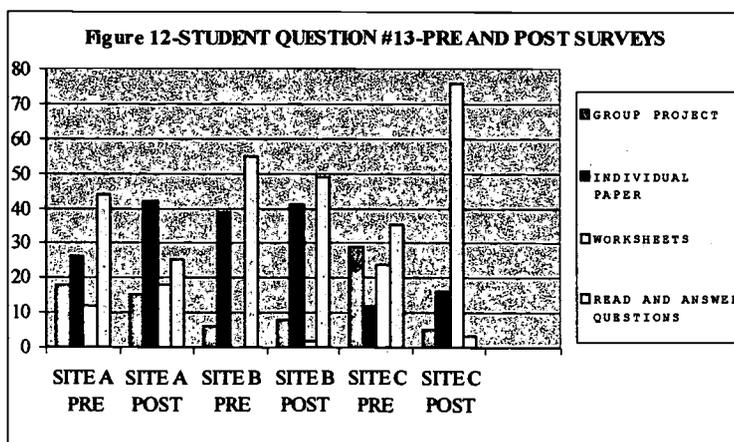
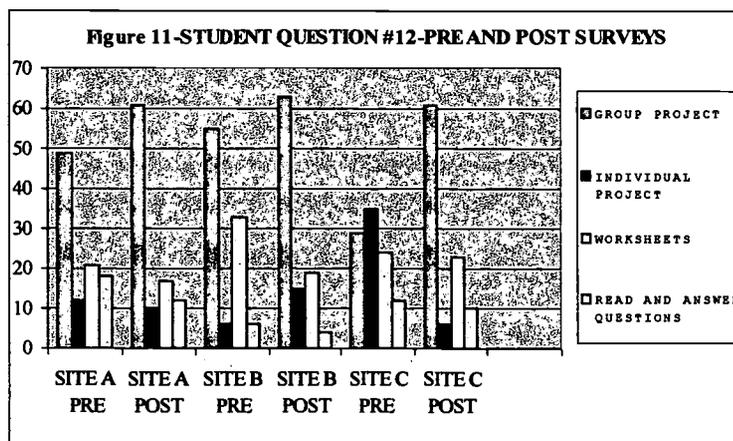
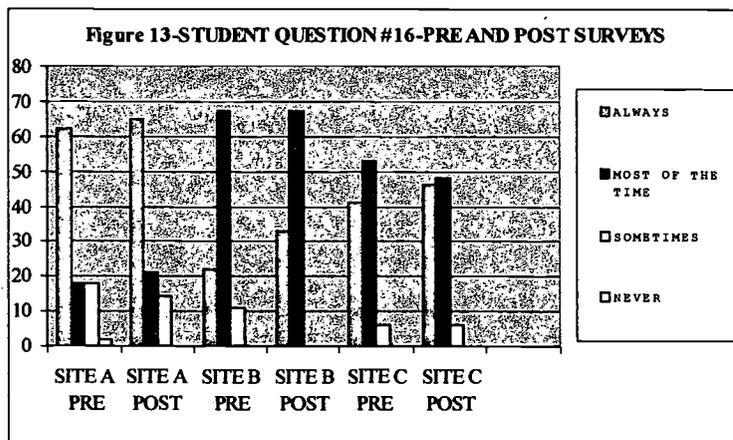


Figure 12 responds to the question, “What type of assignment is your least favorite?”

The results of this question support the results of the question in figure 11. The students at all three sites prefer group work and individual projects as opposed to worksheets and reading and answering questions.

Figure 13 responds to the question, “How often do you do your very best on your school work?” At all three sites, the answers to the question remained basically the same. The researchers feel that this is due to the students answering both surveys with the way they thought the teachers wanted them to answer.



Conclusions and Recommendations

These action researchers collaborated and created an extensive plan to infuse cooperative learning and the multiple intelligences into the classroom. This, along with a positive discipline plan and the encouragement of study skills, was designed to build intrinsic learners.

The researchers surveyed the students to discover what each student's multiple intelligences were and then the results of the surveys were analyzed. After analyzing these results, the students were placed into groups making sure there was a variety of intelligences represented in each group. The next step was to teach a variety of team-building strategies and, at Site A, to work specifically on social skills. The researchers at Site A felt that due to their students' backgrounds, time needed to be spent developing social skills. This need was consistent throughout the entire intervention. Another component was the extremely high mobility rate at Site A in comparison to Sites B and C, which resulted in the researchers having to continually reintroduce group building skills.

The post surveys showed that, by the end of the intervention at all three sites, the children enjoyed cooperative learning activities more than others. The researchers noticed, however, that particularly at Site A there was not much transfer of social skills beyond the actual group work.

This research has been very advantageous at all three sites; however, there are many modifications that we would recommend to make this intervention more successful. The first change would be the number of months that the intervention was employed. Pre-surveys would be completed at the beginning of the school year, and the post-surveys would not be completed until the end of the school year. At all three sites the researchers also felt that a big obstacle that interfered with the intervention was standardized testing which took place for a two week time period during the month of October. Then, beginning in November, because so much emphasis is placed on the results of the state-standardized tests, teachers had to again prepare the students for the upcoming testing in February. Test preparation not only used a lot of time, but many group skills had to be reviewed after the testing was completed.

The researchers felt that the validity of the pre-surveys was questionable due to the possibility of the students not completely understanding the terminology used when being questioned about cooperative learning activities. The researchers also felt that the students answered both the pre and post surveys according to how they thought the teachers would want them to answer, not necessarily how they really felt. The researchers felt that this was also true of the surveys filled out by the parents.

The researchers at Sites B and C feel that the intervention was very successful due to several factors. The first would be that the children at both sites are older and therefore,

more responsible about study skills and have better social skills. The second factor that added to the success of the intervention at these two sites was that the children at Sites B and C are also part of gifted programs and therefore are more likely to be conscientious about their school work. The third factor is the value which the parents at these two sites place on education and the long-term expectations they have for their children.

As a result of this intervention, all four researchers feel that they have permanently changed many of their teaching methods and will consistently use cooperative learning within their classrooms. They also feel that stressing the multiple intelligences within each lesson is another practice which will be an integral part of all lesson plans.

References

Ames, C. (1990, April). The relationship of achievement goals to student motivation in classroom settings. Paper presented at the annual meeting of the American Educational Research Association, Boston.

Anderman, E. & Maehr, M. (1994). Motivation and schooling in the middle grades. Review of Educational Research, 64 (2), 287-309.

Anderman, E. & Midgley, C. (1996). Changes in achievement goal orientations after the transition to middle school. (Report No. CG027148), Kentucky: Biennial Meeting of the Society for Research on Adolescence. (ERIC Doc. No. ED396226)

Armstrong, T. (1993). Seven kinds of smart: Identifying and developing your many intelligences. New York: Penguin Books.

Balkcom, S. (1992). Cooperative learning. [On-line]. Available: ERIC Doc. No. ED346999.

Burke, K. (1992). What to do with the kid who. . . Arlington Heights, IL.: IRI/Skylight.

Brandt, R. (1995). Punished by rewards? A conversation with Alfie Kohn. Educational Leadership, 53, 13-16.

Collins, J. (1998), Seven kinds of smart. Time, 152 (16), 94-96.

Eccles, J., Wigfield, A., Midgley, C., Reuman, D., MacIver, D. & Feldlaufer, H. (1993). Negative effects of traditional middle schools on students' motivation. The Elementary School Journal, 93 (5), 553-574.

Eisner, E. (1999). Performance assessment and competition. Phi Delta Kappan, 80, 658-660.

Evertson, C. & Harris, A. (1992). What we know about managing classrooms. Educational Leadership, 49 (7), 74-78.

Faggella, K., & Horowitz, J. (1990, September). Different child, different style. Instructor, 49-54.

Ford, D., Alber, S., & Heward, W. (1998, March/April). Setting "motivational traps" for underachieving gifted students. Gifted Child Today, 28-33.

Friedman, M. (1991). Developing self-motivated, empowered middle school students: A practical solution strategy. (Report No. MFO11PCO7) Florida. (ERIC Doc. No. ED343234).

Harris, R. (1991). Some ideas for motivating students. [On-line]. Available: www.sccu.edu/faculty/R_Harris/motivate.htm

Hootstein, E.W. (1994). Motivating middle school students to learn. The Clearing House, 67 (4), 213-216.

Hootstein, E.W. (1996, November/December). Motivating at-risk students to learn. The Clearing House, 97-100.

Johnson, S. (1998, September). Working with their kids' teacher, four families solve tough classroom problems. Ladies' Home Journal, 94-118.

Lepper, M.R. (1988). Motivational considerations in the study of instruction. Cognition and Instruction 5, 289-309.

Leslie, C. (1996, July 8). Will Johnny get A's? Newsweek, 72.

Lumsden, L. (1994). Student Motivation to Learn (Report No. 92). Eugene, Oregon: ERIC Clearinghouse on Educational Management. (ERIC Doc. No. ED370200).

Lyman, L. & Foyle, H. (1989). Cooperative learning in the middle school. [On-line]. Available: ERIC Doc. No. ED302866.

MacIver, D. & Reuman. (1993/1994, Winter). Giving their best. American Educator, 24-31.

Martino, L.R. (1993, May). A goal-setting model for young adolescent at risk students. Middle School Journal, 19-22.

Motivation in the classroom. (1994). Engines for Education. The Institute for the Learning Sciences [On-line]. Available: www.ils.nwu.edu/-e_for_e/nodes/NODE-62pg.html

Natale, J.A. (1996). Making smart "cool". The Education Digest, 61 (9), 9-12.

Oldfather, P. (1993). What students say about motivating experiences in a whole language classroom. The Reading Teacher, 46, 672-681.

Ornstein, A. (1995, December/January). Motivation and learning. The High School Journal, 105-110.

Ornstein, A. (1996, June/July). Motivation and learning: A psychological perspective. The High School Magazine, 40-42.

Palardy, M.J. (1997, March). 15 strategies for motivating students. Principal, 20-21.

Parish, T.S. (1999). The essential elements of motivation for students and teachers. Education 119, 649-650.

Quilter, D. (1996, October). Homework: Should you help? Good Housekeeping, 170-174.

Raffini, J. (1993). Winners without losers: Structure and strategies for increasing student motivation to learn. Boston: Allyn and Bacon.

Rinne, C. (1998). Motivating students is a percentage game. Phi Delta Kappan, 79, 620-628.

Rosemond, J. (1995, September). Here's your homework, mom. Better Homes and Gardens, 230-232.

Ryan, R. & Deci, E. (1996), When paradigms clash: Comments on Cameron and Pierce's claim that rewards do not undermine intrinsic motivation. Review of Educational Research, 66, 33-38.

Schunk, D.H. & Cutshall, D. (1997). Motivation for lifelong learning. KDP Record, 33 (4), 124-128.

Schroeder, K. (1995). Education news in brief. The Education Digest, 65 (2), 76-77.

Wallis, C. (1998, October 19). How to make a better student. Time, 80-96.

Wasserstein, P. (1995). What middle schoolers say about their schoolwork. Educational Leadership, 53, 41-43.

White, A.T., (1997). Keys to the might of motivation. The Education Digest, 62 (7), 62-64.

APPENDICES

APPENDIX A

Parent Survey

DIRECTIONS: Please circle the answer which tells best about you and your child.

1. Do you ask your child if they have homework?
 - a. yes
 - b. no
 - c. sometimes

2. Do you help your child with their homework?
 - a. everyday
 - b. 2-3 times a week
 - c. sometimes
 - d. never

3. Would it be helpful to you if your child would write his homework assignments in a notebook for you to see and sign every night?
 - a. yes
 - b. no
 - c. sometimes

4. Do you think homework teaches responsibility?
 - a. yes
 - b. no
 - c. not sure

5. How often do you think children should have homework?
 - a. every day
 - b. 2-3 times a week
 - c. once a week
 - d. never

6. How important do you think homework is?
 - a. very
 - b. somewhat
 - c. not very
 - d. waste of time

7. How much time does your child spend on homework every week?
- a. 0-1 hour
 - b. 2-3 hours
 - c. 4-5 hours
 - d. no time at all
8. Does your child have a special place to do his homework?
- a. yes
 - b. no
9. Is your child involved in any after school activities?
- a. no
 - b. yes-once a week
 - c. yes-twice or three times a week
 - d. yes- four to five times a week
10. What do you feel is most important for your child?
- a. doing homework
 - b. watching T.V.
 - c. playing
 - d. after-school programs
11. When does your child do his/her homework?
- a. before dinner
 - b. after dinner
 - c. in the morning before school
12. What do you think might help motivate your child to want to do his homework?
- a. fear of punishment at school
 - b. fear of punishment at home
 - c. peer pressure
 - d. positive reinforcement at home
 - e. other...please specify
-
-
-

13. Does your child like school?

- a. yes
- b. sometimes
- c. no

14. Do you talk with your child about his school day?
- a. always
 - b. sometimes
 - c. never
15. Do you look at your child's graded papers?
- a. always
 - b. sometimes
 - c. never
16. Do you think your child works up to his potential?
- a. always
 - b. sometimes
 - c. never
17. What do you do when your child brings home his report card? (circle all that apply)
- a. praise him for good grades
 - b. reward him for good grades
 - c. discipline him for bad grades
 - d. never look at report card
 - e. don't care about grades

Parent Survey

DIRECTIONS: Please circle the answer which best suits you and your child.

1. Do you ask your child whether he/she has homework?
 - a. yes
 - b. no
 - c. sometimes

2. Do you actively participate in helping your child with his/her homework? (ie: help with studying for tests, quizzes, help with special projects, help with daily assignments)
 - a. everyday
 - b. 2-3 times a week
 - c. sometimes
 - d. never

3. Do you check your child's assignment notebook?
 - a. everyday
 - b. 2-3 times a week
 - c. sometimes
 - d. never

4. How important do you think homework is to teaching your child responsibility and work ethic?
 - a. very
 - b. kind of
 - c. no at all
 - d. not sure

5. How often do you think children should have homework?
 - a. every day
 - b. 2-3 times a week
 - c. once a week
 - d. never

6. How important do you think homework is?
 - a. very
 - b. somewhat
 - c. not very
 - d. waste of time

7. Approximately how much time does your child spend on homework (on an average) each week?

- a. 0-1 hour
- b. 2-3 hours
- c. 4-5 hours
- d. more than 5 hours.

8. Does your child have a special place to do his homework?

- a. yes
- b. no

9. Is your child involved in any after school activities?

- a. no
- b. yes-once a week
- c. yes-two or three times a week
- d. yes- four to five times a week

10. Which commitment is more important to you for your child to fulfill?

- a. homework
- b. extra-curricular activity

11. When does your child do his/her homework?

- a. before dinner
- b. after dinner
- c. in the morning before school

12. What do you think might help motivate your child to want to do his homework?

- a. fear of punishment at school
 - b. fear of punishment at home
 - c. peer pressure
 - d. positive reinforcement at home
 - e. other...please specify
-
-
-

13. Does your child like school?

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- b. sometimes
- c. no

14. Do you talk with your child about his school day?
- a. always
 - b. sometimes
 - c. never
15. Do you look at your child's graded papers?
- a. always
 - b. sometimes
 - c. never
16. Do you think your child works up to his potential?
- a. always
 - b. sometimes
 - c. never
17. What do you do when your child brings home his report card? (circle all that apply)
- a. praise him for good grades
 - b. reward him for good grades
 - c. discipline him for bad grades
 - d. never look at report card
 - e. don't care about grades

APPENDIX B

Student Survey

DIRECTIONS: Please circle the best answer

1. Do you tell your parent/ parents if you have homework at night?
 - a. yes
 - b. no
 - c. sometimes

2. Do you get help on your homework?
 - a. everyday
 - b. 2-3 times a week
 - c. sometimes
 - d. never

3. Do you write down your assignments?
 - a. yes
 - b. no
 - c. sometimes

4. How important is homework to you?
 - a. very
 - b. somewhat
 - c. not very
 - d. waste of time

5. How often do you think you should have homework?
 - a. every day
 - b. 2-3 times a week
 - c. once a week
 - d. never

6. How much time do you spend on homework every week?
 - a. 0-1 hour
 - b. 2-3 hours
 - c. 4-5 hours
 - d. no time at all

7. How often do you do your homework?
 - a. always
 - b. most of the time
 - c. sometimes
 - d. never

8. Do you have a special place to do your homework?

- a. yes
- b. no

9. Rank the order in which you do these activities after school. Place a 1 beside the activity you do first, a 2 beside the activity you do second, etc.

- _____ take a nap
- _____ eat a snack
- _____ watch TV
- _____ do homework
- _____ talk on the phone
- _____ do an activity with a friend
- _____ SCHOOL RELATED extra curricular activities such as school sports teams, cheerleading, student council, after-school activities
- _____ NON-SCHOOL RELATED extra curricular activities such as private music or dance lessons, swim teams, soccer, football, etc.

10. How do you like to work on assignments or projects?

- a. alone
- b. with a partner
- c. in a cooperative group of 3-5 students
- d. whole class

11. What do you like most about school work? (choose two)

- a. discussions
- b. projects and activities
- c. cooperative learning
- d. homework
- e. tests or quizzes

12. What type of assignment is your most favorite ?

- a. group project
- b. individual project
- c. worksheets
- d. read and answer questions

13. What type of assignment is your least favorite?

- a. group project
- b. individual paper
- c. worksheets
- d. read and answer questions

14. What makes you want to do your school work?
- a. good grades
 - b. to avoid punishment at home
 - c. to avoid punishment at school
 - d. I don't really care about my school work.
15. How often do you try to do what your teacher asks you to do?
- a. always
 - b. most of the time
 - c. sometimes
 - d. never
16. How often do you do your very best on your school work?
- a. always
 - b. most of the time
 - c. sometimes
 - d. never
17. Is it important for you to get good grades?
- a. yes
 - b. sometimes
 - c. no
18. How do you feel when you get good grades? (circle all that apply)
- a. happy
 - b. proud
 - c. embarrassed
 - d. smart
 - e. lucky
 - f. don't care
19. Do you get better grades than your friends?
- a. yes
 - b. sometimes
 - c. no

Student Survey

DIRECTIONS: Please circle the best answer

1. Do you tell your parent/ parents if you have homework at night?
 - a. yes
 - b. no
 - c. sometimes

2. Do you get help on your homework?
 - a. everyday
 - b. 2-3 times a week
 - c. sometimes
 - d. never

3. Do you write down your assignments?
 - a. yes
 - b. no
 - c. sometimes

4. How important is homework to you?
 - a. very
 - b. somewhat
 - c. not very
 - d. waste of time

5. How often do you think you should have homework?
 - a. every day
 - b. 2-3 times a week
 - c. once a week
 - d. never

6. How much time do you spend on homework every week?
 - a. 0-1 hour
 - b. 2-3 hours
 - c. 4-5 hours
 - d. no time at all

7. How often do you do your homework?
 - a. always
 - b. most of the time
 - c. sometimes
 - d. never

8. Do you have a special place to do your homework?
- yes
 - no
9. Rank the order in which you do these activities after school. Place a 1 beside the activity you do first, a 2 beside the activity you do second, etc.
- _____ take a nap
 - _____ eat a snack
 - _____ watch TV
 - _____ do homework
 - _____ talk on the phone
 - _____ do an activity with a friend
 - _____ SCHOOL RELATED extra curricular activities such as school sports teams, cheerleading, student council, after-school activities
 - _____ NON-SCHOOL RELATED extra curricular activities such as private music or dance lessons, swim teams, soccer, football, etc.
10. How do you like to work on assignments or projects?
- alone
 - with a partner
 - in a cooperative group of 3-5 students
 - whole class
11. What do you like most about school work? (choose two)
- discussions
 - projects and activities
 - cooperative learning
 - homework
 - tests or quizzes
12. What type of assignment is your most favorite ?
- group project
 - individual project
 - worksheets
 - read and answer questions
13. What type of assignment is your least favorite?
- group project
 - individual paper
 - worksheets
 - read and answer questions

14. What makes you want to do your school work?
- a. good grades
 - b. to avoid punishment at home
 - c. to avoid punishment at school
 - d. I don't really care about my school work.
15. How often do you try to do what your teacher asks you to do?
- a. always
 - b. most of the time
 - c. sometimes
 - d. never
16. How often do you do your very best on your school work?
- a. always
 - b. most of the time
 - c. sometimes
 - d. never
17. Is it important for you to get good grades?
- a. yes
 - b. sometimes
 - c. no
18. How do you feel when you get good grades? (circle all that apply)
- a. happy
 - b. proud
 - c. embarrassed
 - d. smart
 - e. lucky
 - f. don't care
19. Do you get better grades than your friends?
- a. yes
 - b. sometimes
 - c. no

PARENT SURVEY RESULTS –Pre Intervention

Question #	SITE A				SITE B				SITE C			
	A	B	C	D	A	B	C	D	A	B	C	D
3	76	3	21		44	6	39	11	0	14	57	29
4	70	18	12		72	6	0	22	71	29		
7	50	35	15		11	61	17	11	7	36	21	36
16	29	68	3		28	72	0		50	50	0	

PARENT SURVEY RESULTS –Post-Intervention

Question #	SITE A				SITE B				SITE C			
	A	B	C	D	A	B	C	D	A	B	C	D
3	79	3	18		53	4	35	8	52	5	31	12
4	71	16	13		76	5	0	19	77	21		2
7	73	22	5		27	55	8	10	29	24	8	5
16	33	64	3		32	68			50	50		

STUDENT SURVEY RESULTS –Pre-Intervention

Question #	SITE A				SITE B				SITE C			
	A	B	C	D	A	B	C	D	A	B	C	D
3	56	20	24		67	0	33	0	35	12	53	
4	76	9	15		44	44	6	6	65	30	5	
6	53	21	18	8	33	57	5	5	35	41	24	0
7	71	17	6		44	50	0	0	88	12		
10	26	38	12	24	22	50	28	0	47	53		
11	6	40	11	32 11	14	42	35	6/ 3	46	39	0	5/ 10
12	49	12	21	18	55	6	33	6	29	35	24	12
13	18	26	12	44	6	39	0	55	29	12	24	35
16	62	18	18	2	22	67	11	0	41	53	6	

STUDENT SURVEY RESULTS – Post Intervention

Question #	SITE A				SITE B				SITE C			
	A	B	C	D	A	B	C	D	A	B	C	D
3	83	3	14		70	2	28		73	12	15	
4	87	7	6		56	44	0	0	72	29	9	
6	70	16	0	14	33	57	10	0	54	30	1	15
7	82	13	3	2	56	44	0	0	92	8		
10	15	32	41	12	12	45	37	6	2	35	54	9
11	14	43	25	10 8	19	51	26	2 2	47	14	30	3 6
12	61	10	17	12	63	15	19	4	61	6	23	10
13	15	42	18	25	8	41	2	49	5	16	76	3
16	65	21	14	0	33	67	0	0	46	48	6	0

APPENDIX C

MULTIPLE INTELLIGENCES INVENTORY

NAME _____

Answer each question below by circling either yes or no.

1. I like to doodle or draw.	yes	no
2. I like to have music playing while I'm doing things.	yes	no
3. I am good at sports.	yes	no
4. I am good at giving advice to other people.	yes	no
5. I have a special interest that I like to do by myself.	yes	no
6. I belong to clubs, organizations, and/or committees.	yes	no
7. I write in a diary or journal almost every day.	yes	no
8. I like to play chess or checkers.	yes	no
9. I find it difficult to sit still for a long period of time.	yes	no
10. I like working with or looking at plants and flowers.	yes	no
11. I have a good memory for names, places, dates, or trivia.	yes	no
12. I use my hands a lot when I talk.	yes	no
13. I sing along with the T.V., radio, tapes, or C.D.'s.	yes	no
14. I like math class.	yes	no
15. I have two or more close friends.	yes	no
16. I like putting things into categories.	yes	no
17. I usually know what I want to do.	yes	no
18. I love to read books.	yes	no
19. I have my own pet or would like to have my own pet.	yes	no
20. When I'm riding in the car, I read all the street signs and billboards.	yes	no

21. I like to do puzzles, mazes, and/or Where's Waldo.	yes	no
22. I'm interested in finding out how things work.	yes	no
23. I tap, wiggle, move, or fidget if I'm seated for a long time.	yes	no
24. I love or would love to go camping.	yes	no
25. I would rather figure out maps, charts and/or diagrams than read about them.	yes	no
26. I play a musical instrument or would like to learn how.	yes	no
27. I would rather be outside than inside.	yes	no
28. I like to build with blocks or legos.	yes	no
29. I am very independent.	yes	no
30. I like to hear environmental sounds such as rain, thunder, bird's chirping, animal noises, etc.	yes	no
31. I would rather work alone than in a group.	yes	no
32. I'm a good speller.	yes	no
33. I like art activities.	yes	no
34. I like to visit the zoo.	yes	no
35. I like to take things apart and put them back together.	yes	no
36. I like to tell stories or jokes.	yes	no
37. I understand other people's problems.	yes	no
38. I am a good singer.	yes	no
39. I would rather be with other people than alone.	yes	no
40. I can do arithmetic problems in my head.	yes	no

The Eight Intelligences

There were many candidates for “intelligences” that met his definition. However, after applying numerous criteria, only seven intelligences remained. He has since added an eighth intelligence.

VERBAL/LINGUISTIC INTELLIGENCE



The verbal/linguistic intelligence is concerned with the uses of language. People with this intelligence possess a particularly strong sensitivity to the meanings of words and a skilled aptitude for their manipulation. According to Gardner, these people have “the capacity to follow rules of grammar, and, on carefully selected occasions, to violate them” (1983, p. 77). On yet another level—the sensory level—those with a heightened verbal/linguistic intelligence are able to communicate effectively by listening, speaking, reading, writing, and linking. They also have a strong awareness of the varying functions of language, or more specifically, its power to stimulate emotions. Poets, authors, reporters, speakers, attorneys, talk-show hosts, and politicians typically exhibit verbal/linguistic intelligence.

MUSICAL/RHYTHMIC INTELLIGENCE



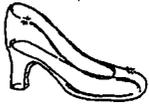
As Gardner describes, “There are several roles that musically inclined individuals can assume, ranging from the avant-garde composer who attempts to create a new idiom, to the fledgling listener who is trying to make sense of nursery rhymes (or other ‘primer level’ music)” (1983, p. 104–105). Each of us holds musical capabilities to some degree, the difference is that some people have more skill than others. No matter what range of talent, we all possess a core of abilities necessary for enjoying a musical experience. These consist of the musical elements of pitch, rhythm, and timbre (the characteristic elements of a tone). People with a more highly developed musical/rhythmic intelligence are singers, composers, instrumentalists, conductors, and those who enjoy, understand, or appreciate music.

LOGICAL/MATHEMATICAL INTELLIGENCE



The logical/mathematical intelligence incorporates both mathematical and scientific abilities. Mathematicians are typically characterized by a love of working with abstraction and a desire for exploration. They enjoy working with problems that require a great deal of reasoning. A scientist, however, is “motivated by a desire to explain physical reality” (Gardner, 1983, p. 145). For scientists, mathematics serves as a tool “for building models and theories that can describe and eventually explain the operation of the world.” Mathematicians, engineers, physicists, astronomers, computer programmers, and researchers demonstrate a high degree of logical/mathematical intelligence.

Chapman, C. (1993). *If the shoe fits.....* Arlington Heights, IL: IRI/ Skylight.



VISUAL/SPATIAL INTELLIGENCE

Visual/spatial intelligence involves the unique ability to comprehend the visual world accurately. Those with visual/spatial intelligence are able to represent spatial information graphically and have a keen gift for bringing forth and transforming mental images. Artists and designers have strong visual/spatial capabilities. They have a certain responsiveness to the visual/spatial world as well as a talent to recreate it to produce a work of art. Also among this group are sailors, engineers, surgeons, sculptors, cartographers, and architects.



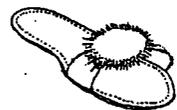
BODILY/KINESTHETIC INTELLIGENCE

The bodily/kinesthetic intelligence is based on the gift of control of one's bodily motions and the talent to manipulate objects with deftness. It is possible for these elements to exist separately, however, most people possess both. In addition, people such as inventors and actors tend to have a great deal of bodily/kinesthetic intelligence because the role of their bodies is so critical to their occupations. Others with substantial bodily/kinesthetic intelligence include dancers, acrobats, and athletes.



NATURALIST INTELLIGENCE

Man's adaptation and survival in his environment is the key component to the naturalist intelligence. It is the study of science. Individuals with a strength in this intelligence can recognize and distinguish between and among a variety of species of plants and animals, as well as make other distinctions and categorizations in "nature" (Gardner 1995). Those strong in this intelligence are hikers, botanists, scientists, oceanographers, veterinarians, gardeners, and park rangers.



INTRAPERSONAL INTELLIGENCE

The heart of intrapersonal intelligence lies in the ability to understand one's own feelings. These people instinctively comprehend their own range of emotions, can label them, and can draw on them as a means of directing their own behavior. In Gardner's words, "the intrapersonal intelligence amounts to little more than the capacity to distinguish a feeling of pleasure from one of pain, and on the basis of such discrimination, to become more involved in or to withdraw from a situation" (1983, p. 239). Examples of those with higher-than-average intrapersonal capabilities include the introspective novelist, wise elder, psychologist, or therapist—all of whom possess a deeper understanding of their feelings.



INTERPERSONAL INTELLIGENCE

Unlike intrapersonal intelligence, which is directed inward, interpersonal intelligence is one that focuses outward to individuals in the environment. The most basic skill among those with a high degree of interpersonal intelligence is the talent for understanding others. Those exhibiting this intelligence have the gift for noticing and making distinctions among other individuals, and more specifically among their "moods, temperaments, motivations, and intentions" (Gardner, 1983, p. 239). For example, at a very

APPENDIX D

GETTING THE YEAR
STARTED OUT RIGHT
WITH
COOPERATIVE LEARNING

T-Shirt Project

Targeted Social Skill: Respecting others

- Supplies:
1. 1 piece large white construction paper per child
 2. markers of all colors

- Activity 1
Day 1
1. Have each child draw a large T-shirt on the paper. (fill the page. Have an example hanging up.
 2. Using their favorite color, have them draw and decorate their first name or nickname across the "chest" of the shirt.
 3. On left sleeve, draw a picture illustrating their favorite book.
 4. On right sleeve, draw a picture illustrating their favorite vacation, either one they've taken, or one they're like to take.
 5. Bottom right corner of shirt, draw their favorite animal
 6. Bottom left corner of shirt, draw what they want to be when they grow up
 7. Immediately under name have them draw a picture of whatever they want.

- Activity 2
Day 2
- Divide the children up into partners. Each person must tell their partner all about their shirt. What each picture is, why they drew it, etc. The listener then must interview the speaker and ask him/her as much as they can about themselves. **THEY CAN'T TAKE NOTES.**
Now listener and speaker exchange roles.

- Activity 3
Day 2 & 3
- Each set of partners must come to the front of the class, holding each Day other's T-Shirt. Each person must tell the class as much about their partner and the T-shirt as they possibly can.

- Activity 4
- Hang T-Shirts up on clothesline in room.

- Activity 5
- Hold onto T-Shirts until the end of the 9 weeks.
Lay all T-shirts out on tables. The children are to choose their favorite color of marker and, **WITH NO TALKING**, go to each T-shirt and write a positive comment about the child on the T-Shirt. They cannot write a comment which someone else has already written. Positive comments only. Play music during writing exercise.

- Activity 6
- Have children fill out an assessment paper on this project.

OUR T-SHIRT PROJECT

Did you like this T-shirt Project?

yes

no

kind of

What did you like the best about it?

What did you like the least about it?

Would you make any changes in this project? If so, what would they be?

ACTIVITY TWO

So that the children will get to know one another and the teacher will have the opportunity to get to know everyone in the class,

~divide the children up into partnerships...preferably with someone they don't know very well.

~hand out the "People Search" sheet. Give the children enough time to find people who can sign their names each person's sheets

~after a certain amount of time, everyone needs to go back to their seats. The teacher now goes through each question on the people search and ask what signatures people got for each one.

PEOPLE SEARCH

FIND SOMEONE WHO:

WRITE THEIR NAME HERE:

1. Saw the movie Tarzan
2. went to the Heart of Illinois Fair
3. writes left-handed
4. Went swimming in a swimming pool
5. Played on a Sports Team
6. Went to the mall
7. Rode on a bus
8. Visited relatives out of state
9. Went to summer camp
10. Went to a birthday party
11. Had a family cookout
12. Went to the Gus Macker Tournament
13. Has all their school supplies
14. Stayed in Peoria all summer
15. Went to see fireworks on the 4th of July
16. Attended summer school
17. Has been at Harrison since Kindergarten
18. Has more than 5 people in their family
19. Can say the school motto
20. Has a summer birthday (June, July, August)
21. Has a winter birthday (December, January, February)

PEOPLE SEARCH PROJECT

yes mostly some no

Did you like this project?

Did you like talking to
other people?

Did you like signing
other people's papers?

Did you like discussing
it afterwards?

Did you find out anything
new about anyone?

If you could do this again, would you change
it or keep it the same?

ACTIVITY THREE

So that the children will get to know one another and the teacher will have the opportunity to get to know everyone in the class,

- ~divide the children up into partnerships...preferrably with someone they don't know very well.
- ~hand out the "Interview Your Partner" sheet. Give the children enough time to interview each other and write the answers on their papers.
- ~now each child needs to come to the front of the room and "introduce" their partner to the rest of the room using their interview sheet to refer to.

INTERVIEW YOUR PARTNER

write the answer to each question in the space provided.

PERSON BEING INTERVIEWED: _____

PERSON DOING INTERVIEW: _____

1. FULL NAME

2. AGE

3. BIRTHDAY

4. MEMBERS OF YOUR FAMILY

5. FAVORITE COLOR

6. FAVORITE MOVIE OR T.V. SHOW

7. MUSIC GROUP

8. FAVORITE SPORT OR ACTIVITY

9. FAVORITE HERO

10. FAVORITE FOOD

11. MOST IMPORTANT PERSON
IN YOUR LIFE

12. WHAT WOULD YOU DO WITH
\$100?

13. WHAT ARE YOU REALLY GOOD AT?

14. WHAT WOULD YOU LIKE TO BE
BETTER AT?

15. WHAT WAS YOUR FAVORITE
EXPERIENCE IN 2ND GRADE?

ACTIVITY FOUR

WHAT LISTENING LOOKS LIKE, SOUNDS LIKE and FEELS LIKE (PG 82/ BLUEPRINTS BOOK)

- ~Divide the class into two groups/ Group A and Group B
- ~Anyone in Group A is the describer , anyone in Group B is the listener.
- ~ Give the following instruction sheet with the sketch to everyone in Group A
(A-1, B-1)
- ~ Now, reverse the roles and hand out new direction sheets, (A-2, B-2)
- ~ Give the students another 5 minutes.
- ~Now make a T-chart with the entire class giving input.
"As you were doing these two activities, What did listening look like?
What did listening Sound like? What did listening feel like?"

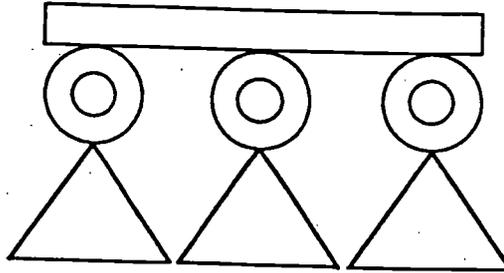
GOOD LISTENING

LOOKS LIKE	SOUNDS LIKE	FEELS LIKE
1. eyes alert	1. quiet	1. understanding
2. leaning toward speaker	2. nodding head	2. being able to follow directions
3. heads nodding at right time	3. furrowed brow	3. confidence
4. taking notes		

Bellanca, J. & Fogarty, R. (1991). Blueprints for thinking in the cooperative classroom. Arlington Heights, IL: IRI/ Skylight.

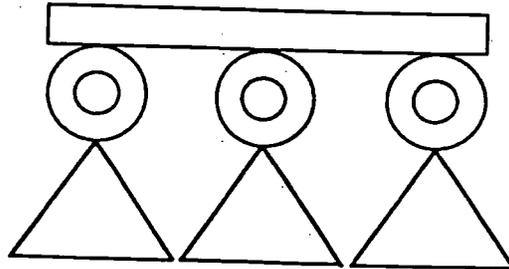
PARTNER A-1

Your task is to describe the following figure to a partner. Your partner must sit back-to-back with you and may not (a) see your sketch, or (b) talk with you. Your partner must reproduce your sketch using your instructions. You will have five minutes.



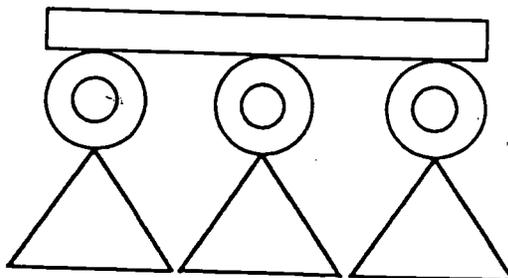
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Your task is to describe the following figure to a partner. Your partner must sit back-to-back with you and may not (a) see your sketch, or (b) talk with you. Your partner must reproduce your sketch using your instructions. You will have five minutes.



Bellanca, J. & Fogarty, R. (1991). Blueprints for thinking in the cooperative classroom. Arlington Heights, IL: IRI/ Skylight.

PARTNER A-2

You may not see the sketch. You may ask clarifying questions about the instructions and discuss how you are sketching.

PARTNER A-2

You may not see the sketch. You may ask clarifying questions about the instructions and discuss how you are sketching.

PARTNER A-2

You may not see the sketch. You may ask clarifying questions about the instructions and discuss how you are sketching.

Bellanca, J. & Fogarty, R. (1991). Blueprints for thinking in the cooperative classroom. Arlington Heights, IL: IRI/ Skylight.

PARTNER B-1

Your task is to sketch the figure as instructed by your partner. You may not talk with your partner or see the original. You will have five minutes.

PARTNER B-1

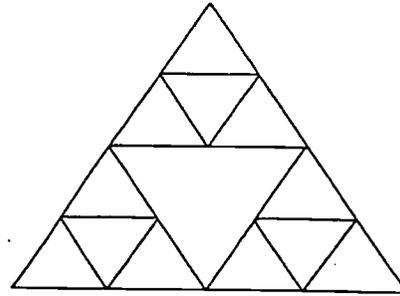
Your task is to sketch the figure as instructed by your partner. You may not talk with your partner or see the original. You will have five minutes.

PARTNER B-1

Your task is to sketch the figure as instructed by your partner. You may not talk with your partner or see the original. You will have five minutes.

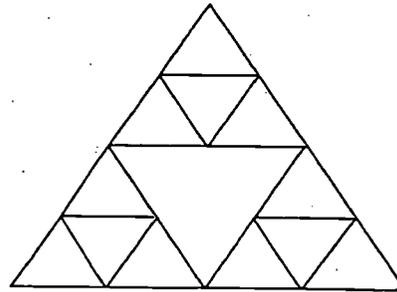
PARTNER B-2

You may not show this sketch to your partner. You may answer your partner's questions about your instructions. You have five minutes.



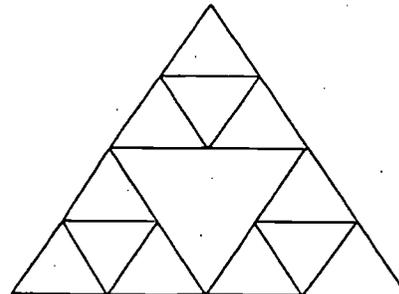
PARTNER B-2

You may not show this sketch to your partner. You may answer your partner's questions about your instructions. You have five minutes.



PARTNER B-2

You may not show this sketch to your partner. You may answer your partner's questions about your instructions. You have five minutes.



ACTIVITY FIVE

(two charts and a web)

Supplies: Partner

Activity 1: Have children sit facing each other.
Have them figure out which one has a birthday closest to the first day of school.
That child is to be the talker.
The other is to be the listener.
The talker is to tell the listener about his family, including pets.
The listener is to TOTALLY IGNORE the talker, but not get up out of his seat.
Say "go" and time for approximately 3 minutes.

Activity 2. On overhead OR chart paper, have a chart prepared which says

looked like:	sounded like:	felt like:
--------------	---------------	------------

Discuss this chart after it is filled out.

Activity 3. Now have the same talker and the same listener. This time, the listener is to listen.

Activity 4. Fill out an chart which is identical to the first chart.

Activity 5. Discuss the attributes of a good listener making a web with "Good Listener" in the middle.

ACTIVITIES

SIX AND SEVEN

team building/ social skills
Responsibilities of Individual Group Members
Characteristics of Individuals

~discuss the jobs of group members in learning groups....everyone has a certain function and responsibility

EXAMPLES OF GROUP MEMBER JOBS:

~reader/reporter (reads problem outloud to group, reports to whole class)

~recorder (write every down than people say)

~encourager (encourages people who have ideas)

~praiser ("good job!" "That's a good idea because....")

~Discuss with the group what they think it takes to be a good group member. Don't write anything down yet...just briefly discuss.

Now hand out 6A -Group members

~After a given amount of time (10 minutes?) Have groups settle down and then report one by one to rest of class.

~Teacher writes down everyones' top 5 (omitting repetitions) on a chart. Keep chart in room permanently to hang and revisit when necessary

~Follow same format for 7A-Individual Characteristics on a different day.

GOOD GROUP MEMBERS

You will need to assign these jobs to the members of your group:

Reader _____

Recorder _____

Encourager _____

Praiser _____

PROBLEM:

What are the five most important qualities A PERSON CAN HAVE? Write down all of the ideas your group can come up with and then decide what they think are the 5 most important.

Listed below are some qualities you might want to consider, but you also need to COME UP WITH YOUR OWN!!

~happy

~funny

~good listener

~nice

~good listener

~nice house

~pretty

~patient

~beautiful clothes

~respectful of others

~good attitude

~cooperative

~nice car

~rich

~gentle

~bossy

BELOW LIST THE TOP 5 QUALITIES WHICH ARE IMPORTANT FOR EVERY PERSON TO HAVE:

GOOD GROUP MEMBERS

You will need to assign these jobs to the members of your group:

Reader _____

Recorder _____

Encourager _____

Praiser _____

PROBLEM:

What are the five most important qualities A PERSON CAN HAVE? Write down all of the ideas your group can come up with and then decide what they think are the 5 most important.

Listed below are some qualities you might want to consider, but you also need to COME UP WITH YOUR OWN!!

~quiet voice
~uses no "put downs"
~reminds others to stay on task
~stays on task
~respects others

~participation
~creative
~popular
~funny
~tells good jokes
~asks questions if they don't understand

~cooperative
~good listener
~makes good contributions
~says encouraging things to others

BELOW LIST THE TOP 5 QUALITIES OF A GOOD GROUP MEMBER

MARSHMALLOWS AND TOOTHPICKS !!!

OBJECTIVE:

You are to design and build a building. This building may NOT be only rectangular or square...the more interesting the shape, the better....for instance, it might be a dome, a geometric shape of some sort, or have towers. The class will vote on its favorite, most interesting shape.

MATERIALS:

1 bag of marshmallows
a box of toothpicks

PROCEDURE:

1. Assign duties to each group member
2. DISCUSS and PLAN before you begin constructing
3. You have 30 minutes

ACTIVITIES NINE AND TEN

- ~Hang up DOVE Guidelines chart in a prominent place in the room.
- ~ Discuss Dove Guidelines thoroughly with children
- ~Revisit the "What makes a good group member" Chart which is already hanging up in room.
- ~Have children decide upon jobs for each group member
- ~Hand out "That's a good Idea" lesson 1 to each group.
- ~Have group solve problem 1 and then report back to class...Have class decide as a whole which ideas were the best.
- ~Follow same procedure for "That's a good idea, Problem two" tomorrow

THAT'S A GOOD IDEA

1. Use DOVE guidelines:
 - D**efer judgment
 - O**pt for original
 - V**ast number of ideas are best
 - E**xpand by piggybacking
2. Respond in turn with:
 - a) "That's a good idea because..."
 - b) Your idea
3. Allow students to say, "I pass."
4. Keep going around the circle until everyone has had a chance to respond.
5. Record all ideas and reasons on a chart.

TOPIC	
Idea	Reason
1.	1.
2.	2.
3.	3.

Bellanca, J. & Fogarty, R. (1991). Blueprints for thinking in the cooperative classroom. Arlington Heights, IL: IRI/ Skylight.

That's a Good Idea, Lesson 1

YOU BORROWED AN EXPENSIVE VIDEO GAME FROM A FRIEND. YOUR PARENTS WOULDN'T BUY THAT ONE FOR YOU BECAUSE THEY THINK IT IS TOO VIOLENT AND DON'T WANT YOU TO PLAY IT. YOU BRING THE GAME HOME AND PLAY IT WITHOUT TELLING YOUR PARENTS ABOUT IT. THAT EVENING, YOU TAKE THE GAME OUT, SET IT ON THE FLOOR, AND BEGIN TO PLAY ANOTHER GAME. YOUR DOG CHEWS UP THE BORROWED GAME AND RUINS IT.

YOU MUST COME UP WITH 5 DIFFERENT SOLUTIONS TO THIS PROBLEM. REMEMBER YOUR D.O.V.E. RULES!! USE EACH OTHERS' IDEAS TO COME UP WITH YOUR OWN!!!

That's a Good Idea, Lesson 2

PROBLEM: THERE IS A STUDENT IN YOUR CLASS (JOHNNY) WHO IS VERY SMART. IN FACT, SOME OF THE KIDS THINK HE'S THE SMARTEST ONE IN THE WHOLE CLASS. HE IS IN YOUR GROUP. YOUR GROUP HAS BEEN ASSIGNED TO DO A BIG, IMPORTANT PROJECT. PART OF THE GRADE WILL BE BASED ON PARTICIPATION OF EACH MEMBER. JOHNNY RARELY HANDS HIS WORK IN ON TIME AND SOMETIMES DOESN'T BOTHER TO DO IT AT ALL.

YOU MUST COME UP WITH 5 DIFFERENT SOLUTIONS TO THIS PROBLEM. REMEMBER YOUR D.O.V.E. RULES!! USE EACH OTHERS' IDEAS TO COME UP WITH YOUR OWN!!!

ACTIVITY ELEVEN

STACK THE DECK !!!!

WHAT TO DO:

Construct a card tower and receive points for each card you use.

MATERIALS:

a terry cloth towel or wash cloth

50 cards

a calculator

tally sheet and pencil

choose a recorder, and a mathematician, the rest are construction engineers

BEGIN FORMING YOUR TOWER

1. You are going to form a tower one level at a time.
2. Each card is worth a certain number of points.
3. Each level must have a ceiling, so that the next tier has something to stand on
4. These are the points each level is worth.
 - level one (base level)~each card is worth 5 points
 - level two ~ each card is worth 10 points
 - level three~ each card is worth 20 points
 - level four~ each card is worth 30 points
5. The mathematician and recorder are to calculate the number of points
6. If you need more cards, you may "buy" them from other groups....
 - you will have to take 5 points away from YOUR score for each card....the group who "sells" you the cards will get to add 5 points to their score for each card sold.
7. At the end of the time period, add up all of the points. The group with the highest points is the WINNER!!!

STACK THE DECK !!!!

TALLY SHEET

Example:

Level 1

Tally marks per card	#	X 5	Total
----------------------	---	-----	-------

LEVEL 1

Tally Marks per card	#	X5	Total
----------------------	---	----	-------

LEVEL 2

Tally Marks per card	#	X10	Total
----------------------	---	-----	-------

LEVEL 3

Tally Marks per card	#	X20	Total
----------------------	---	-----	-------

LEVEL 4

Tally Marks per card	#	X30	Total
----------------------	---	-----	-------

Cards bought from other teams	#	X5	Total
-------------------------------	---	----	-------

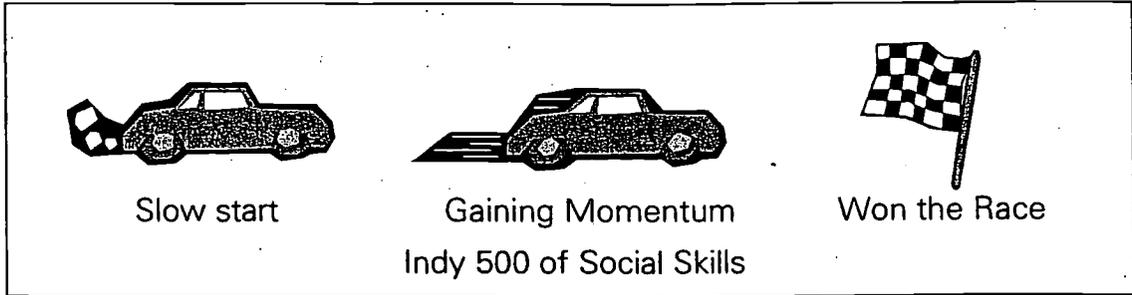
Cards sold to other teams	#	X5	Total
---------------------------	---	----	-------

112^{TOTAL}

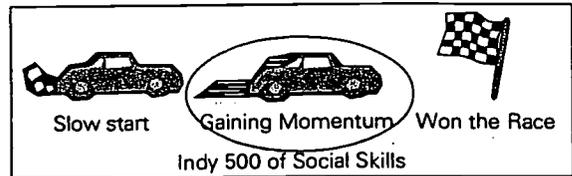
APPENDIX E

EXAMPLES

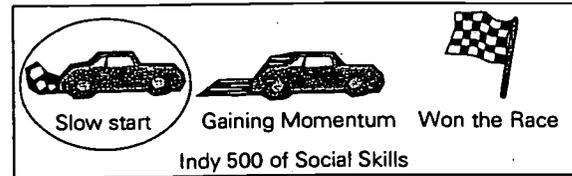
**GROUP PROCESSING
HOW DID WE DO?**



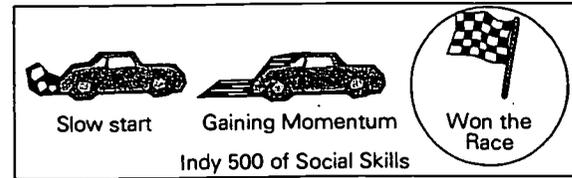
1. How did we stay on task?



2. How did we listen to each other?



3. How did we encourage each other?



4. What do we need to work on next time?

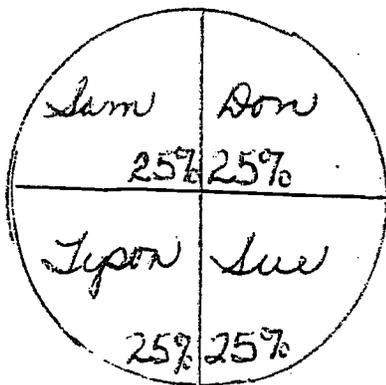
5. How do we want to celebrate our successes?

(Adapted from Burke, K. B. (1992) *What to do with the kid who . . . Developing Cooperation, Self-Discipline, and Responsibility in the Classroom.* p. 63)

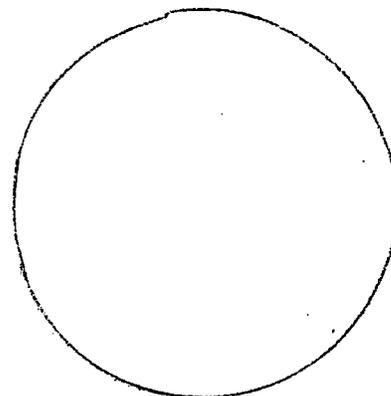
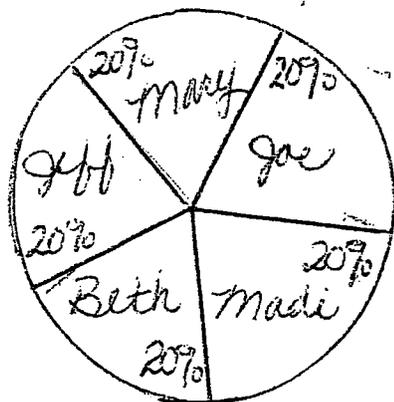
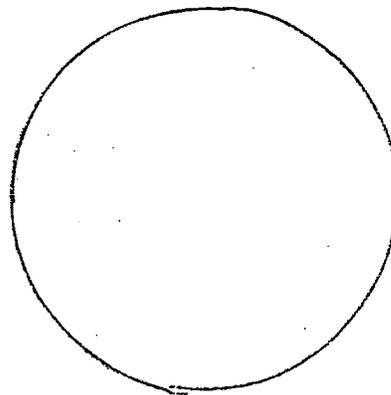
~EVALUATION OF GROUP~
 HOW DID OUR GROUP MEMBERS WORK
 TOGETHER?

If the goal of good group work is for each group member to do about the same amount of work and/or discussion, if you colored in a pie chart, all parts would be identical. Color in the pie chart below according to how much you think each group member did. Label each part with the group member's name.

How it should look:



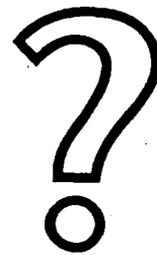
How it really looked:





Mrs. Potter's Questions

1. What were you supposed to do?
2. What did you do well?
3. What would you do differently next time?
4. Do you need any help?



Bellanca, J. & Fogarty, R. (1991). Blueprints for thinking in the cooperative classroom. Arlington Heights, IL: IRI/ Skylight.

~EVALUATION OF GROUP~

Did you like doing this project?

YES

KIND OF

NO

Why or why not? _____

What did you like most about this project?

What did you like least about this project?

If you were asked to do this project again, what would you change about it?

~HOW OUR GROUP DID TODAY~

1. Did we do what we were supposed to do?
(Did we accomplish our goal?) YES NO KIND OF

2. Did we work without arguing? YES NO KIND OF

3. Did we listen well and help each other? YES NO KIND OF

4. Should we do anything differently next
Time? (if "yes" what would you do?)

5. What did we do well as a group?

6. If I could give us a group grade, I think we deserve:

APPENDIX F

APPENDIX G

APPENDIX H

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ons Taken:

ection:

PLUSES (+)	MINUSES (-)	INTERESTING (?)

gments, Notes (Continued on back, as needed):



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