IMPROVING STUDENT MOTIVATION IN MIXED ABILITY CLASSROOMS USING DIFFERENTIATED INSTRUCTION

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ABSTRACT

This action research project report summarizes the methods used to reduce boredom and frustration and increase students' academic motivation in three mixed-ability classrooms. This action research project included 21 third grade students, 23 fifth grade students, and 28 eighth grade students (n=72) during the dates of September 10, 2007, through December 14th, 2007.

The teacher researchers observed several behaviors that highlighted boredom, frustration, and motivation, as problems in their classrooms. The behaviors they witnessed were talking during instructional and work time, rushing through assigned tasks, inability to self-select free-time activities, working slowly, and lacking enthusiasm toward tasks. To gather data regarding these problems, the three teacher researchers developed and administered three documentation tools. These tools included a parent survey, student survey and an observation checklist. The results of the parent survey allowed the teacher researchers to conclude that the majority of their students spoke positively about school. However, only some of them were challenged, while many were bored. The outcome of the student surveys provided the teacher researchers with information about their students' attitudes toward school. Over half of their students conveyed feelings of boredom while in the classroom (n=44). The majority of their students also stated that they were always or sometimes distracted during work time (n=66). Other results included some students being excited, while a minority felt their work was never challenging. The observation checklist helped to reinforce the teacher researchers' original beliefs about the problem. Through tally marks, the teacher researchers were able to track 14 targeted behaviors. After calculating the data, the teacher researchers noted that the majority of incidences were those of talking during instructional and work time, and students' inability to self-select free-time activities.

The teacher researchers chose Differentiated Instruction as the intervention to be implemented. Three specific Differentiated Instruction strategies were selected. These included free-time activities, tiered assignments, and authentic assessments. Free-time activities encompassed different content areas and appealed to the students' multiple intelligences. Students were allowed to choose an activity to occupy any free-time they had in the classroom. Tiered assignments allowed the same objective to be obtained at various levels and modalities. The teacher researchers created assignments that appealed to the multiple intelligences ranging from simple to complex. Each student chose the assignment that best suited his or her needs. Authentic assessments were culminating activities and tests that targeted learning styles, multiple intelligences, and ability levels. Even though authentic assessments provided many options, the teacher was still testing a uniform objective.

At the conclusion of the project, the teacher researchers compared and analyzed their pre and post data to identify several changes that occurred in their classrooms. These include, fewer students distracted during work-time, and more students appeared bored while fewer students were excited about school. On a positive note, the overall number of off-task behaviors decreased. After reviewing their results, the teacher researchers recommended the continuance of Differentiated Instruction. However, only one strategy at a time until that strategy is perfected. This would allow the teacher researchers to better manage the intervention.

CHAPTER 1

PROBLEM STATEMENT AND CONTEXT

General Statement of the Problem

In today's classroom, students come to school with a variety of academic abilities, learning styles, and multiple intelligences. It has become an immense challenge for teachers to meet every student's need in today's mixed ability classrooms. When students are not taught at their interest or readiness levels frustration and boredom increase causing a lack of motivation. There will be three teacher researchers conducting this action research. The first teacher researcher comes from Site A and teaches 22 third graders in a self-contained classroom, the second teacher researcher is from Site B and teaches 23 fifth graders in a self-contained classroom, and the third teacher researcher is from Site C and will be conducting the study with 28 eighth grade students. The teacher researchers noticed talking during work time, off task behaviors, and students not able to select free time activities, which led them to believe that students had a lack of motivation. In order to document evidence of these behaviors the teacher researchers are going to distribute a parent survey, student survey, and use a behavior observation checklist. The purpose of these tools is to show different perspectives of students' attitudes, behavior, and motivation levels in the classroom.

Immediate Context of the Problem

This action research project was conducted by three teacher researchers from different schools. The teacher researcher at Site A teaches third grade self-contained. The teacher researcher at Site B teaches fifth grade self-contained. The teacher researcher at Site C teaches eighth grade language arts. The demographic information of these sites and districts follows, and was retrieved from the appropriate Illinois School Report Card, 2005 unless otherwise noted.

Site A

The teacher researcher at Site A teaches in self-contained third grade. Site A is an intermediate school located in a rural midwest farming community. The total student population of the third through fifth grade school was 300, 158 (53%) boys and 142 (47%) girls. The intermediate school was predominantly Caucasian (72.3%) as seen in Table 1, *Racial/Ethnic Background by Percentage of Site A.* However, the state had a notably higher percentage of African American students than the school or district.

Table 1

Racial/Ethnic Background by Percentage of Site A

	Caucasian	African American	Hispanic	Asian/Pacific Islander	Native American	Multiracial/ Ethnic
School	72.3	3.7	22.3	1.3	0.3	0.0
District	74.0	2.0	19.5	0.9	0.4	3.2
State	56.7	20.3	18.3	3.7	0.2	0.7

Of the 300 students who make up Site A, 66.7% (n=200) come from low-income families. According to the Illinois School Report Card, “Low-income students come from families receiving public aid; live in institutions for neglected or delinquent children, are supported in foster homes with public funds; or are eligible to receive free or reduced-price lunches” (p.1). This school’s low-income student population of 66.7% is notably higher than the state average of 40.0%. The school report card also showed that the school’s Limited-English-proficient-rate falls at 1.7%, which was below the state average of 6.6%. According to the Illinois School Report Card, “Limited-English-proficient students are those students eligible for transitional bilingual programs” (p.1). The school’s truancy rate of 1.0% was lower than the state’s truancy rate of 2.2%. Comparing mobility rates, the school’s rate of 15.7% was similar

than the state's rate of 16.1%. Attendance rates of the school and the state were comparable, with the school's rate being 95.6% and the state's rate being 93.9%.

Table 2 below compares the total number of teachers at the district and state level and their ethnicities. At this site, there were no African American teachers, whereas the state had 9.9% African American teachers. Although this district had 1.7% Hispanic teachers, that does not sufficiently meet the needs of the 19.5% Hispanic student population as seen in Table 1.

Table 2

Total Number of Teachers and Their Ethnicity by Percentage of Site A

	Total Number	Caucasian	African American	Hispanic	Asian/Pacific Islander	Native American
District	59	98.3	0.0	1.7	0.0	0.0
State	128,079	84.3	9.9	4.5	1.2	0.2

The school district of Site A had 20.3% (n=12) male and 79.7% (n=47) female teachers. The teachers in this district had an average teaching experience of 18.5 years. Of the 59 teachers working in the district, 44.1% (n=26) had earned a bachelor's degree, while 55.9% (n=33) had earned a master's degree or beyond. The average teacher's salary of Site A was $52,806, which was similar to the state's average salary of $55,558. The targeted district had a population of 982 students, with a student/teacher ratio of 18:1, as compared to the state of 19:1. The student/administration ratio in the district was 228:1, as compared to the state of 210:1. A third grade class at Site A had an average class size of 24.0 students.

The time allotted for class instruction in the core subject areas for Site A include: 60 minutes of mathematics, 30 minutes of science, 150 minutes of English/language arts, and 30 minutes of social science. The ISAT is taken yearly by the students in this district. The third and fifth grade students were tested on reading and mathematics and the students were tested on

science in the fourth grade. The overall ISAT performance for site A was 78.4% meeting or exceeding compared to the state's score of 69.2% meeting or exceeding. Third grade students at Site A performed at 73.4% meeting or exceeding in reading compared to the state's score of 66.6% meeting or exceeding. In mathematics, third grade students performed at 86.2% meeting or exceeding compared to the state's score of 79% meeting or exceeding. Overall, in the areas of reading and mathematics the third grade students of Site A had performed higher than the state on the yearly ISAT test.

Site A's administrative structure is displayed in the table below. At this site, there were three special education teachers, one for each grade to accommodate the students' needs. There was one reading specialist for the entire site and one bilingual aide for the entire district.

Table 3

Administrative Structure of Site A

Position	Number	Position	Number
Band	1	Parent Educator	1
Bilingual Aide	1	Principal	1
Counselor	1	Reading Specialist	1
Custodians	2	Secretaries	2
Director of Building/Grounds	1	Special Education Teachers	3
Food Services	3	Speech	1
Health Assistants	2	Superintendent	1
Librarian	1	Teachers	14
Noon Supervisor	2	Teacher's Aides	2
Nurse	1	Technology Coordinator	1

Site A had special programs that helped its students achieve in school and the community. Twice a year there were Reading Nights that embraced parent involvement. Character Counts, a character education program was just initiated in 2006. The Good News Club was an after school

Christian program that met once a week. Girls Scouts had weekly meetings and activities after school in the cafeteria.

At one time, Site A was the junior high. There have been many demolitions and additions made to this school. Located in the rear of the school is a large parking lot with a playground area on either side. To the south of the school is a large grassy field with a baseball diamond. The front of the school has parking available on both sides of the street. The original bell from the old elementary school is placed in the front on Site A. Currently, the school houses the district office, the technology coordinator's office, has a gymnasium, school office, four classrooms in each grade level, computer laboratory, library, cafeteria, three special education rooms, and one nurse's office. Site A also houses an Early Bird Pre-school program in an extra classroom. Recently, the site has been equipped with wheelchair accessible lifts, because part of the building has a second story.

Site B

The teacher researcher at Site B teaches self-contained fifth grade at Site B. Site B is a middle school with sixth, seventh, and eighth grade departments while housing one section of fifth grade self-contained. Site B school is located in a rural midwest farming community. The total student population of the fifth through eighth grade was 898, 395 boys and 503 girls. The middle school was predominately Caucasian as seen in Table 4, *Racial/Ethnic Background by Percentage of Site B*. However, the state African American population was notably higher than the school or district.

Table 4

Racial/Ethnic Background by Percentage of Site B

	Caucasian	African American	Hispanic	Asian/Pacific Islander	Native American	Multiracial/ Ethnic
School	88.9	4.2	3.9	3.0	0.0	0.0
District	88.2	4.4	4.3	2.4	0.1	0.6
State	56.7	20.3	18.3	3.7	0.2	0.7

Of the 898 students who made up Site B, 34.9% were classified as low-income. According to the Illinois School Report Card "Low-income students come from families receiving public aid; live in institutions for neglected or delinquent children; are supported in foster homes with public funds; or are eligible to receive free or reduced-price lunches" (p.1). The school report card also showed that the school's Limited-English-proficient rate falls at 0.0%, which was below the state average of 6.6%. According to the Illinois School Report Card, "Limited-English proficient students are those students eligible for transitional bilingual programs" (p.1). The school's truancy rate of 0.4% was lower than the state's truancy rate of 2.2%.Comparing mobility rates, the school's rate of 9.0% was considerably lower than the state's rate of 16.1%. Attendance rates of the school and state were comparable, with the school's rate being 95.7% and the state's rate being 93.9%.

Table 5 below compares the total number of teachers at the district and state levels and their ethnicities. At this site, there was a 9.3% difference between the state (9.9%) and district (0.6%) percentages of African American teachers. Also at this site, there is a disparity between the percentage of African American and Hispanic teachers compared to the percentage of African American and Hispanic students as seen in Table 4.

Table 5

Total Number of Teachers and Their Ethnicity by Percentage of Site B

	Total Number	Caucasian	African American	Hispanic	Asian/Pacific Islander	Native American
District	166	98.2	0.6	1.2	0.0	0.0
State	128,079	84.3	9.9	4.5	1.2	0.2

The school district of Site B had 25.9% (n=43) male and 74.1% (n=123) female teachers. The teachers in this district had an average teaching experience of 16 years. Of the 166 teachers who worked in the district 26.6% (n=44) have earned only a bachelor's degree and 73.4% (n=121) have earned a master's degree or beyond. The average teacher salary of Site B was $54,435, which was similar to the state's average salary of $55, 558. The targeted district had a population of 2, 999 students with a student/teacher ratio of 18:6. The student/administrator ratio of Site B was 303:5. A fifth grade class at Site B had an average class size of 21 students.

The time allotted in the core subject areas for Site B included: 50 minutes of mathematics, 35 minutes of science, 95 minutes of English/language arts, and 35 minutes of social science. The ISAT is taken once yearly by the students in this district. The fifth grade students were tested in the content areas of reading and mathematics. Seventh grade students were tested in the area of science and eighth grade students were tested in the areas of reading and mathematics. The overall ISAT performance of Site B was 73.1% meeting or exceeding compared to the state's score of 68.9% meeting or exceeding. Fifth grade students at Site B performed at 69.7% meeting or exceeding in reading compared to the state's score of 59.8%. In mathematics the fifth grade students of Site B performed at 74.1% meeting or exceeding versus the state's score of 73.1% meeting or exceeding. Overall, in the areas of reading and

mathematics the fifth grade students of Site B achieved higher scores than the state on the yearly ISAT test.

Site B's administrative structure is displayed in the table below. At this site, five special education teachers were needed to accommodate the special education population. Three social workers assisted the counselors and special education teachers to identify which modifications would best benefit the special education students.

Table 6

Administrative Structure of Site B

Position	Number	Position	Number
ALE Supervisor	1	Secretaries	4
Assistant Principals	1	Social Workers	3
Assistant Superintendent	1	Special Education Teachers	6
Counselors	2	Speech and Language Therapists	2
Custodians	6	Superintendent	1
Food Services	21	Supervisor/Playground Assistants	2
Librarian	1	Teacher's Assistants	12
Nurse	1	Teachers	50
Principal	1	Technology Coordinators	4

Site B is best known for being named after former President Ronald Reagan. Each year the fifth grade students attend a field trip to the boyhood home of Ronald Reagan. Prior to attending the field trip, the fifth grade social studies curriculum is enriched with information chronicling Ronald Reagan's life to build student's background knowledge. Last year, Site B adopted a new web-based grading and attendance program. With this program, parents can log on from home and view their child's current grades and attendance record. This program serves as an effective tool for parent communication and involvement in their child's education.

Currently, Site B is a middle school building. The exterior of the building incorporates both original structures and new additions. To enter the school, you turn east on a one-way drive

that will lead you to a generous concrete parking lot in the rear of the school. Behind the parking lot is a sizeable grass field. The grass field holds some student activities and football practice. To exit the school you will travel west on a one-way drive until you come to a street. The main entrance to the school is located in the new addition. Upon entering the building, you will see the main office to the right. Inside you will observe two secretaries working behind a large blue counter. Also, in the main office is a staff mailroom, the nurse's office, and the three administrators offices. Directly across from the main office is the library. The library is also part of the new construction. The front of the library has large glass windows decorated with student's language arts projects. Inside, there is an oversized desk that houses the electronic checkout system and all the new books that have yet to be distributed to the shelves. Students can select books from one of the six stacks then head to one of the two quiet reading zones to relax and enjoy their newly found adventure. In the northwest corner of library is access to the computer laboratory. The computer laboratory houses 32 PC computers. The remainder of the school is separated into four wings; one for each grade level. The fifth and sixth grade wing houses the fifth and sixth grade classrooms, a computer laboratory, the library, a gymnasium, the counselor's office, the social worker's office, the teacher's lounge, and four student restrooms. The seventh and eighth grade wing houses the seventh and eighth grade classrooms, the lunchroom, a gymnasium, and four student restrooms.

Site C

The teacher researcher at Site C is an eighth grade language arts teacher. Site C is a middle school located in a rural midwest farming community. The total student population of the sixth through eighth grade school was 303, with 159 (52%) boys and 144 (48%) girls. The middle school was predominantly Caucasian as seen in Table 7, *Racial/Ethnic Background by*

Percentage of Site C. One disparity that should be noted is the notably higher percent of African American students in the state compared to the school or district.

Table 7

Racial/Ethnic Background by Percentage of Site C

	Caucasian	African American	Hispanic	Asian/Pacific Islander	Native American	Multiracial/ Ethnic
School	79.2	0.3	16.4	1.3	0.0	2.8
District	74.0	2.0	19.5	0.9	0.4	3.2
State	56.7	20.3	18.3	3.7	0.2	0.7

Of the 317 students who made up Site C, 63.7% (n=202) came from low-income families. According to the Illinois State Report Card, “Low-income students come from families receiving public aid; live in institutions for neglected or delinquent children; are supported in foster homes with public funds; or are eligible to receive free or reduced-price lunches” (p.1). The school’s low-income student population of 63.7% was notably higher than that state average of 40%. The school report card also showed that the Limited-English-proficient rate fell at 0.6%, which was below the state average of 40.0%. According to the Illinois School Report Card, “Limited-English-proficient students are those students eligible for transitional bilingual programs” (p.1). The school’s truancy rate of 1.9% was lower than the state’s truancy rate of 2.2%. When the mobility rates are compared, the school’s rate of 19.2% was greater than the state’s rate of 16.1%. Attendance rates of the school and the state were comparable, with the school’s rate at 94.2% and the state’s rate at 93.9%.

Table 8 below compares the total number of teachers at the district and state level and their ethnicities. At this site, there were no African American teachers, whereas the state had

9.9% African American teachers. Also, we noticed a discrepancy between the number of Hispanic teachers versus students.

Table 8

Total Number of Teachers and Their Ethnicity by Percentage of Site C

	Total Number	Caucasian	African American	Hispanic	Asian/Pacific Islander	Native American
District	59	98.3	0.0	1.7	0.0	0.0
State	128,079	84.3	9.9	4.5	1.2	0.2

The school district of Site C had 20.3% (n=12) male and 79.7% (n=47) female teachers. The teachers in this district had an average teaching experience of 18.5 years. Of the 59 teachers that worked in the district, 44.1% (n=26) had earned a bachelor's degree, while 55.9% (n=33) had earned a master's degree or beyond. The average teacher's salary of Site C was $52, 806, which was similar to the state's average salary of $55,558. The targeted district had a population of 982 students, with a student/teacher ratio of 18:1, as compared to the state of 19:1. The student/administration ratio in the district was 228:1 compared to the state of 210:1. An eighth grade class at Site C had an average class size of 18:1 students.

The time allotted for class instruction in the core subject areas for Site C included: 47 minutes of mathematics, 47 minutes of science, 47 minutes of English/language arts, and 47 minutes of social science. The ISAT is taken yearly by the students in this district. The sixth, seventh, and eighth grade students are tested in reading and mathematics. The overall ISAT performance for Site C was 60.7% meeting or exceeding compared to the state's score of 68.9% meeting or exceeding. The eighth grade students at site C performed at 53.3% meeting or exceeding in reading compared to the state's score of 72.7% meeting or exceeding. In mathematics, eighth grade students performed at 52.3% meeting or exceeding compared to the

state's score of 54.3% meeting or exceeding. Overall, in the areas of reading and mathematics site C ranked lower than the state on the ISAT test.

Site C's administrative structure is displayed in the table below. At this site, there were four special education teachers, at least one for each grade to accommodate the students' needs. There was only one bilingual aide for the entire school district.

Table 9

Administrative Structure of Site C

Position	Number	Position	Number
Band	1	Parent Educator	1
Bilingual Aide	1	Principal	1
Counselor	1	Reading Specialist	1
Custodians	2	Secretaries	2
Director of Building/Grounds	1	Special Education Teachers	3
Food Services	3	Speech	1
Health Assistants	2	Superintendent	1
Librarian	1	Teachers	14
Noon Supervisor	2	Teacher's Aides	2
Nurse	1	Technology Coordinator	1

Currently Site C is a middle school, and includes sixth through eighth grade. Site C has a semi-circle drive in the front of the school that includes a parking lot. Located in the back of the school is a larger parking lot that also includes a basketball court. Directly behind the rear parking lot is a large field that encompasses a track. The layout for Site C includes one pod of classrooms for each grade level. Some other important spaces are the gymnasium, school office, three computer labs, library, cafeteria, and the nurse's office. The front of Site C, has a main office and two main hallways. These hallways all connect the school in a rectangular formation. Located in the middle of the formation is the school's library and above the library is a second floor that has four classrooms.

Reflection

We feel that high poverty rates, teacher ethnicity, and standardized testing all contribute to the problem of low motivation in the classroom. The number of families at Sites A and C considered low-income are 66.7%, and the families at Site B considered low-income are 34.9%, which are high numbers for small communities. Low-income means that many of our students are receiving public aid, are neglected, may come from foster homes, and receive free or reduced-price lunches, so the focus in their lives is not on school, but on survival. Our districts' teacher ethnicity does not represent all students. There are a high number of Hispanic students, but a low number of Hispanic teachers, so students may not feel as connected with their teachers. We are concerned this might negatively affect their motivation. The last problem that we think affects motivation is standardized testing. There is such a high expectation on teachers to show high scores on these tests, that they do not have time to meet all students' needs. Teachers mostly teach the same curriculum to all students so they can get enough taught by the test, so many students are left behind or not challenged. Thus, the students do not feel motivated in the classroom.

Local Context of the Problem

Sites A, B, and C are all located in neighboring communities. Located in northwestern Illinois, these communities are rural and have similar demographics therefore; we have chosen the community of Site B to represent the other two sites. According to the U.S. Census Bureau, in 2005, the community's mean population was 15,941. In 1999, the median household income was $40,967. In these communities the percentage of people below poverty level was 9.4% in 2003. Described below is the age distribution of the community of Site B. The largest population was the age group of 25-44.

Table 10

Average Age Distribution of Communities of Site B

Age	Number	Percentage
15 or younger	2, 734	17.2%
16-24	2, 013	12.6%
25-44	5,520	34.6%
45-64	3,300	20.7%
65 and older	2,374	14.9%

The following table displays the average race and ethnicity for the aforementioned sites. These communities had a notably higher population of Caucasians than any other ethnicity.

Table 11

Average Race and Ethnicity of Communities of Sites B

Race and Ethnicity	Number	Percentage
Caucasian	13,762	86.3%
African American	1,671	10.5%
American Indian/Alaskan Native	22	0.1%
Asian	130	0.8%
Native Hawaiian/Pacific Islander	8	0.1%
Hispanic or Latino	175	1.1%
Two or More Races Combined	173	1.1%
Hispanic	685	4.3%

There are four different levels of educational attainment. The majority of individuals 25 years and older were high school graduates, as can be seen in Table 12 below.

Table 12

Average Educational Attainment of Communities of Site B

Educational Attainment	Number	Percentage
High School Graduates	9,000	36.7%
Some College or Associates Degree	7,453	30.4%
Bachelor’s Degree	2,102	8.6%
Master’s/Professional or Doctorate Degree	1,127	4.6%

The following paragraph describes the home and occupation information for the communities of Site B. The mean of household members of owner-occupied housing units was 2.58 people compared to renter-occupied housing units that had 2.25 members. In 2004 the communities of Site B had a mean unemployment rate of 6.7%. However, there were a variety of employment opportunities. The industries that were in this area include: agriculture/forestry/fishing, construction, manufacturing, wholesale trade, retail trade, transportation/warehousing, information, finance/insurance/real estate, professional/management/administration, education/health/social services, arts/entertainment/recreation, other services, public administration. The two largest industries were manufacturing at 22.3% and education/health/social services at 20.2%. The smallest industries were wholesale trade at 2.9% and information at 1.9%. In 2005, the total crime index for Site B was 569.

The demographics of Sites A, B, and C parallel one another. However, each individual community provides a unique history, issue specific enhancements, and attractive recreational opportunities. Sites A and C are located in the same city and Site B is located twelve miles away.

Sites A and C are located in a small farming city that was founded in 1839. It is nestled on the south bank of the beautiful Rock River. Northwestern Steel and Wire sits on these banks and was an integral part to this community's survival (Life After Steel). In 2001, this important factory was shut down, but soon after was reopened on a smaller scale as Sterling Steel. Since this restructuring, the city and its people have suffered greatly and endured many economical hardships. They are trying to rebound, but it has been a difficult journey with many families moving to find new occupations. Despite the hardships, there have been improvements to this little town. Interstate 88 brings a lot of business and visitors, which pushes the city to make

continual improvements. Many retail and food chains have been opened in the past years to enhance the lives of the people. Road construction projects are frequent to keep the citizens safe and to keep the town up-to-date. This area also offers many recreational opportunities for its citizens including parks, swimming, hiking, fishing, cultural arts, golf, go-carts, and many holiday traditions (researcher's experience).

Sites A and C also belong to the same school district. In 2002, the district restructured its schools into attendance centers. One building houses the primary grades of kindergarten through second grade. The intermediate level, third through fifth, is located in another building while the middle school is maintained in its own building. Both sites have individual mission statements which provide guidance and direction for the teachers, parents, and students. The mission statement of Site A is:

> The mission of this school is to provide students with a solid, yet diverse educational experience; to promote active, lifelong learning; and to develop the skills necessary to become responsible citizens. This mission will be accomplished through the commitment of staff, students, parents, and the community in a safe, respectful environment (Site A Intermediate School. (n.d.).

The mission statement of Site C is:

> At this school, we are committed to the pursuit of excellence. It is our goal to address the varying needs of our young adolescents academically, socially, emotionally and physically and in so doing, provide the highest quality educational experience to all. It is also our goal to establish and maintain a positive, non-threatening environment which focuses on the development of higher level cognitive skills, positive attitudes and a cooperative spirit. It is our

> belief that that with the cooperation of parents, community, students, and staff our goals can be achieved. We understand the power of unity and teamwork. Therefore, it is from this conviction that we join together to establish education as a priority (Site C Middle School. (n.d.).

This district is composed of three schools and one superintendent. In 2002, the Illinois School Report Card stated the total school tax rate of this district was $2.89 per $100. The instructional expenditure for each pupil was $4,030 and the operating expenditure for each pupil was $7,012. There have been no recent referendums in this district. Technology is important and each building has computer laboratories and computers in each classroom. The technology coordinator helps the district stay current and directs the teachers how to utilize new technology.

As for Site B, it was founded by John Dixon in 1830. Site B is known as a "Place to Come Home to". Site B will always be a place to come home to for our 40th President Ronald Reagan. Ronald Reagan became a citizen of Site B at a young age. Today, elementary students visit the boyhood home of President Ronald Reagan to gain insight about the president and their community's history. Site B is not only known for being the home of a former president, but also for the annual Petunia Festival. The Petunia Festival began in 1960. The local men's club viewed the stark roadways as a blank canvas. Planting four thousand petunias along a one-half mile stretch of roadway painted the blank canvas a vibrate pink. Currently, the Petunia Festival occurs each summer. Many of the fifteen thousand residents participate in the planting and maintaining of twenty-three thousand petunia plants each year (Site B Area Chamber of Commerce).

In 1965, Site B became an educationally driven community by passing a referendum to build a community college. Through the years, the community college has gained much popularity with area high school graduates by serving as a comfortable educational transition.

Like smaller communities, Site B utilizes its local park district to entertain its citizens. Citizens can become active by playing golf, riding bike trails, fishing, engaging in competitive games of racquetball, volleyball, and basketball, weight training, or strolling through the tranquil woods (Site B Area Chamber of Commerce).

Site B is a unified district composed of three elementary attendance centers ranging from kindergarten to fourth grade, one middle school housing fifth through eighth grade, and a single high school serving grades ninth through twelfth. One superintendent oversees the district and there are no feeder schools incorporated into the district of Site B. The mission statement of Site B is, "The mission of this school district, in cooperation with the community, will provide students with a comprehensive educational program that produces well-educated, self sufficient, and involved citizens (Site B Middle School. (n.d.)."

In 2002, the district's tax base was 4.65%. There have not been any recent referendums related to the district. The district of Site B is rich in technological resources. Each fifth grade classroom possesses a classroom computer for professional use, a smart cart that houses the computer and projector, and a student computer used to enrich the Accelerated Reader program (a program in which students can earn points based upon the amount of classroom or free reading they participate in). Each school has at least two student computer laboratories and one Smartboard.

Reflection

We feel that Sites A and C have certain demographics in their communities that cause concern in the classroom, while Site B has a more stable community. The closing of the steel factory in the town where Site A and C are located caused many families to move and have a drop in their income. Students and parents had to live through their families' struggles, and once

again may not have had their full thoughts on school and learning. We have noticed a recent increase of students who had initially moved after the factory closing, which will once again cause stability issues within the families and school life. Site B has had no recent factory closing causing not as many community hardships. All three Sites have recently restructured their building to attendance centers, which takes a while for all parties involved to get used to. The teachers especially need to work more closely now with their team members to develop the correct curriculum to motivate students, which will take a lot of time and effort.

National Context of the Problem

Lack of motivation in mixed ability classrooms is an important problem in education today. Teachers are expected to reach all learners ranging from special education all the way to gifted, but teachers feel overwhelmed and unprepared to reach all their needs (Wehrmann, 2000). Thus, students become bored with the curriculum and frustrated because their readiness levels and interests are not met (Anderson, 2007). Often when students are bored, they do not view education as purposeful or beneficial (Crump, 1995). Learners often steer clear of participating in activities in which they are unsuccessful and it has been proven that behavior issues are most likely to occur when a student expends much energy and fails (Bru, 2006). Even though teachers cannot control having a mixed-ability classroom, they can control the factors that influence the students in those classrooms, and this is what our research will try to prove.

CHAPTER 2

PROBLEM DOCUMENTATION

Evidence of the Problem

The purpose of this research project was to increase motivation in the mixed-ability classrooms of 22 third graders, 23 fifth graders, and 28 eighth graders (n=73). The three ways the evidence was documented were a Parent Survey, a Student Survey, and an Observation Checklist. During the week of September 10, 2007, a Parent Survey (Appendix A) was distributed to the parents of the targeted students to assess their children's academic motivation at home and in school. Also, during the week of September 10, 2007, a Student Survey (Appendix B) was administered to the targeted students to understand students' attitudes towards their learning. During the weeks of September 10, 2007, and September 17, 2007, the teacher researchers used an Observation Checklist (Appendix C) with the targeted students to observe their behaviors during instruction and work time.

Parent Survey

The Parent Survey (Appendix A) was sent home on September 10, 2007, to the 22 third grade parents, 23 fifth grade-parents, and 28 eighth-grade parents (n=73). The purpose of this instrument was to assess their children's academic motivation at home and in school. Seventy-three total surveys were sent home and 65 (89%) were returned. Of the 22 third-grade parent surveys, 20 (91%) were returned by September 19, 2007. Of the 23 fifth grade parent surveys, 17 (74%) were returned by September 19, 2007. Of the 28 eighth grade parent surveys, 28 (100%) were returned by September 19, 2007. The Parent Survey included five questions, all of which were Likert-scale questions. For three of the questions, the scale provided choices of always,

sometimes, never, and unsure. One question offered the choices of very high, high, medium, little, and none. Another question provided choices ranging from five to zero (Appendix A).

In question one, parents were asked if their child spoke positively about school subjects. Of the 65 Parent Surveys that were returned .06% (n=4) stated that their child never spoke positively about school.

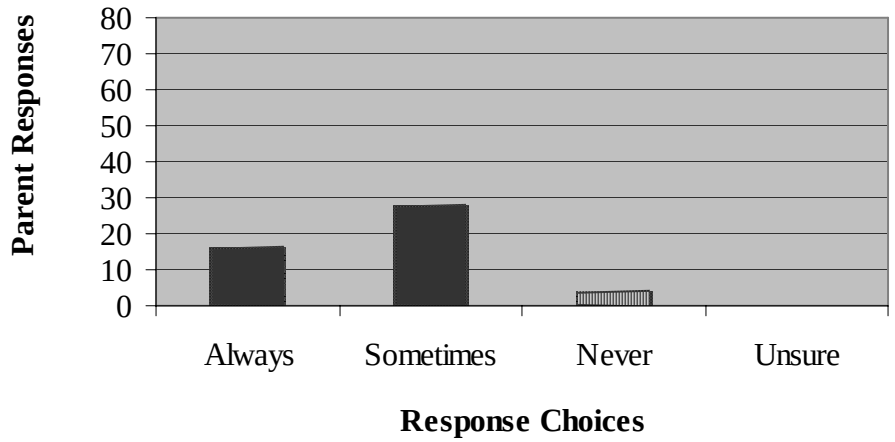

Figure 1: Students' Feelings About School Subjects (n=65)

In question two, parents were asked if their child often felt bored in school. Of the 65 parents surveyed, 50% (n=32) believed their child was sometimes bored and 34% (n=22) believed their child was never bored.

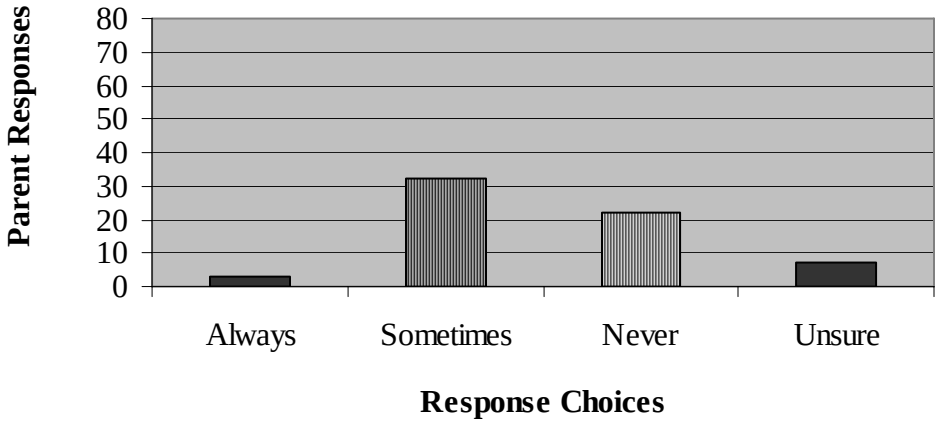

Figure 2: I Feel My Child Is Often Bored In School (n=65)

In question three, parents were asked how many days they helped their child with homework. Of the 65 parents surveyed, 77% (n=49) helped their child three to five days a week.

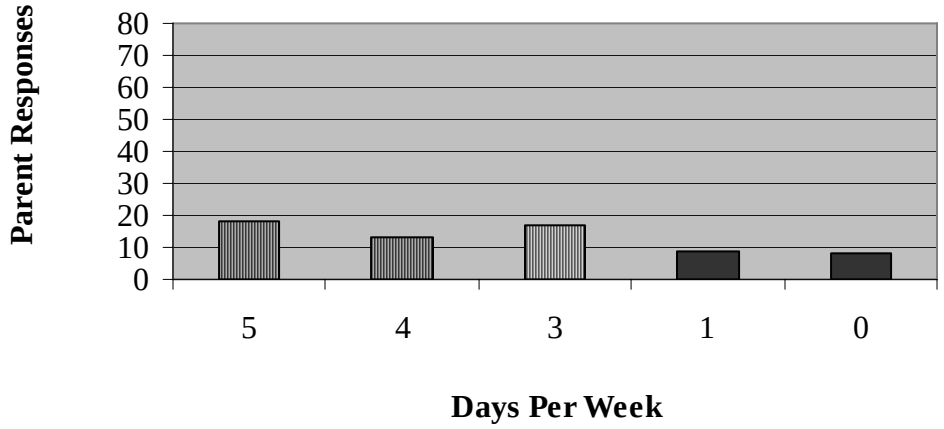

Figure 3: I Work With My Child _____ Day(s) A Week (n=65)

In question four, parents were asked to state their frustration level when helping their child with homework. Of the 65 parents surveyed .06% (n=4) felt very high or high frustration levels when helping their child with homework

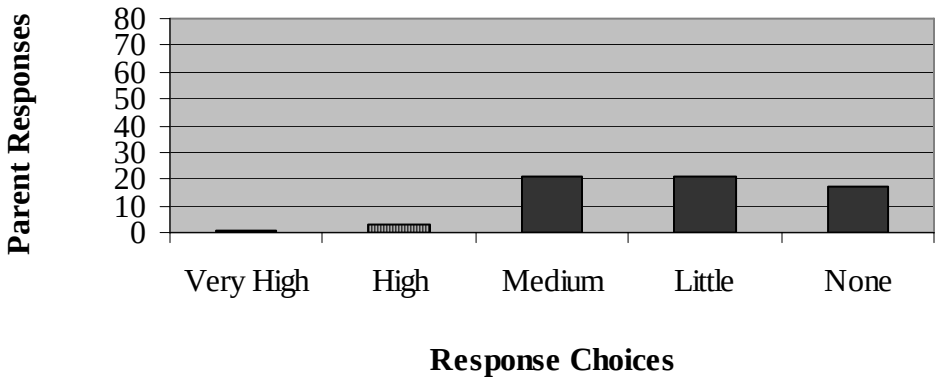

Figure 4: Parent's Frustration Levels (n=65)

In question five, parents were asked if their child was challenged by homework assignments. Of the 65 parents surveyed, 77% (n=50) stated that their child was sometimes challenged by homework and 11% (n=7) said that their child was always challenged by homework.

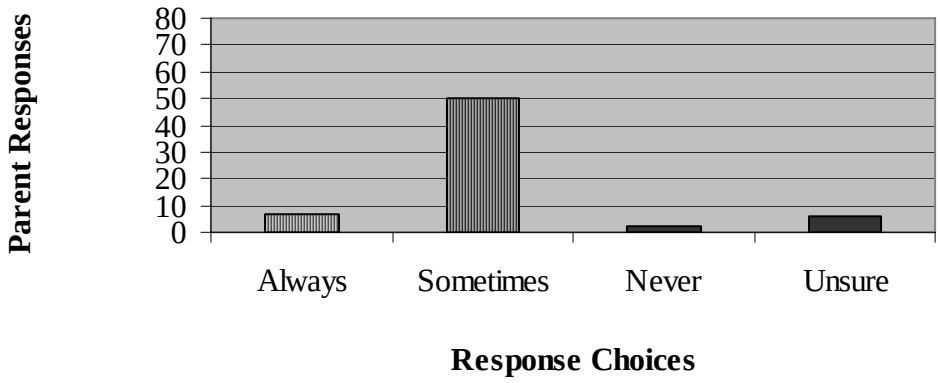

Figure 5: Current Homework Assignments Challenge My Child (n=65)

Student Survey

The Student Survey (Appendix B) was administered in each teacher researcher's classroom on September 10, 2007, to 22 third-grade students, 23 fifth-grade students, and 28 eighth-grade (n=73). Of the 73 surveys administered, all 73 were collected. The purpose of this survey was to assess students' academic motivation at school. The Student Survey included five questions, four of which were Likert-scale questions. The scale provided choices of always, sometimes, and never. One question provided a yes or no choice (Appendix B).

In question one, students were asked if they were excited about school. Of the 73 student surveys completed, 79% (n=58) of the students stated that they were sometimes or never excited about school.

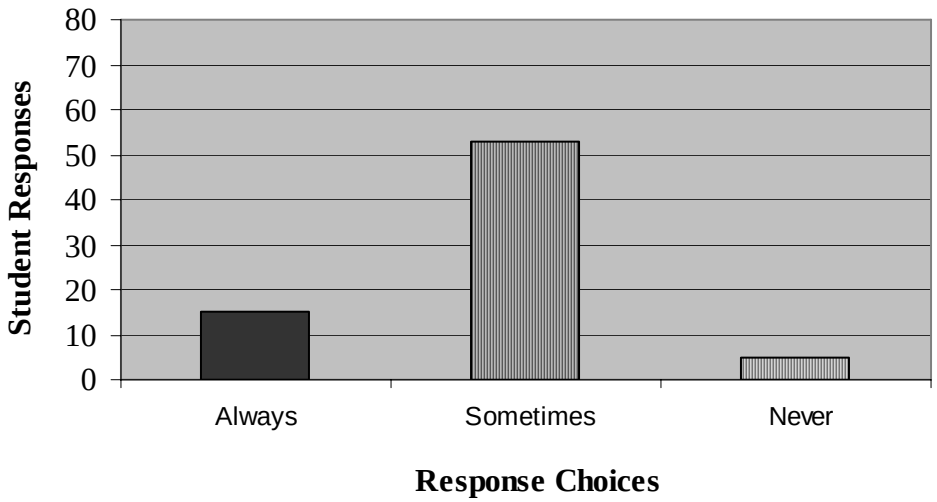

Figure 6: I Am Excited About School (n=73)

In question two, students were asked if they were easily distracted during work time. Of the 73 students surveyed, 90% (n=66) stated that they were always or sometimes distracted during work time.

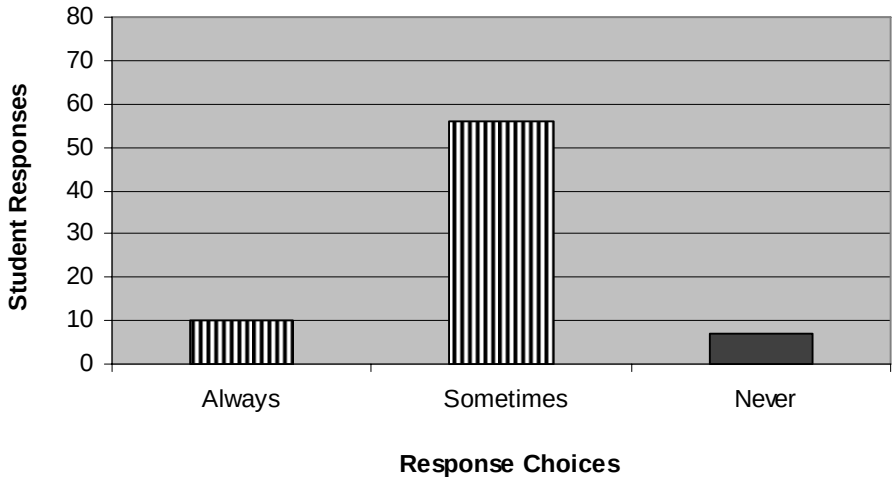

Figure 7: I Get Distracted Easily During Work Time (n=73)

In question three, students were asked if their work was too hard. Of the 73 students surveyed, 23% (n=17) stated that their work was never hard for them to complete.

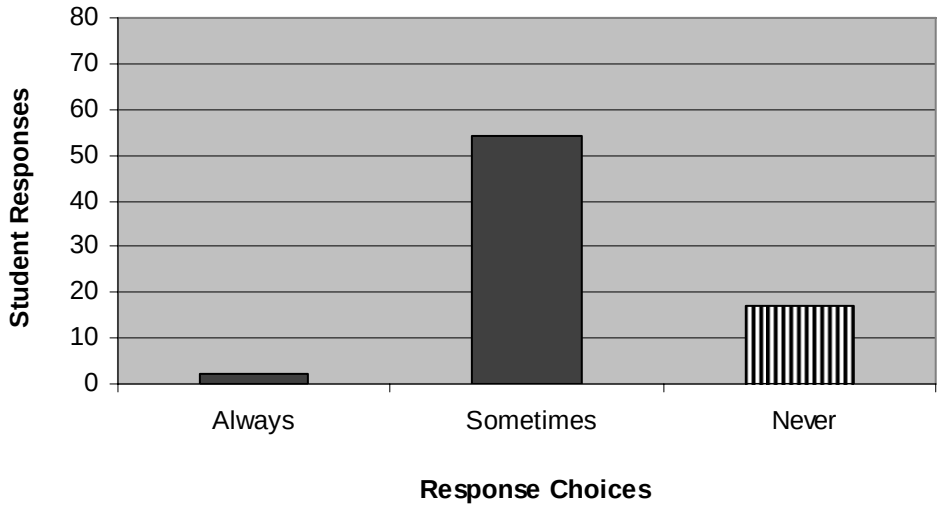

Figure 8: My Work Is Too Hard (n=73)

In question four, students were asked if they feel bored when they finish their work. Of the 73 students surveyed, 60% (n=44) stated that they were always or sometimes bored when they finished their work.

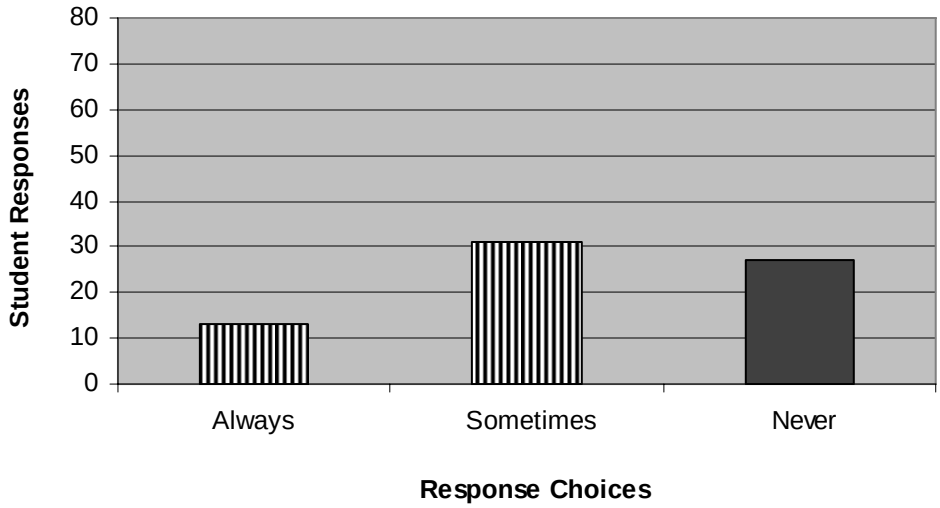

Figure 9: I Feel Bored When I Finish My Work (n=73)

In question five, students were asked if they would like a choice in the kind of work they do. Of the 73 students surveyed, 99% (n=72) stated that they would like a choice.

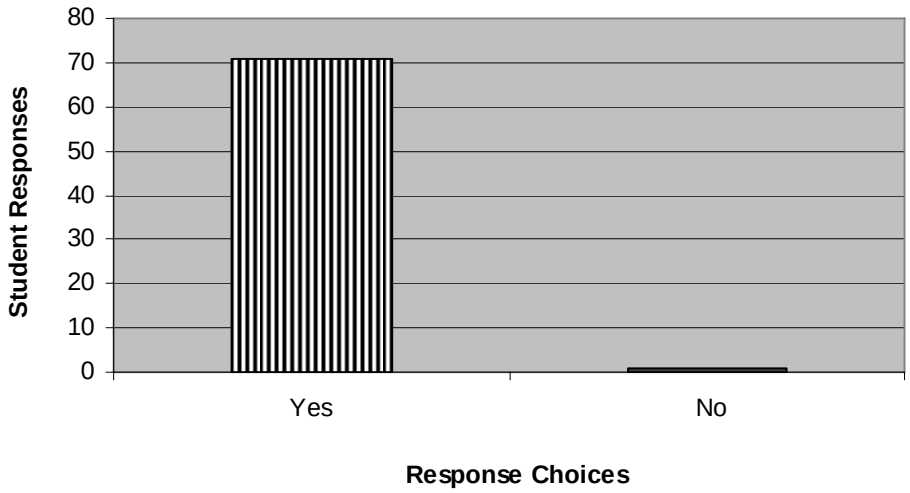

Figure 10: I Would Like To Choose The Kind Of Work I Do (n=73)

Observation Checklist

The Observation Checklist (Appendix C) was completed in each teacher researcher's classroom during the dates of September 10, 2007 and September 21, 2007, by observing 22 third-grade students, 23 fifth-grade students, and 28 eighth-grade students (n=73). The 22 third-graders were observed during math and social studies, the 23 fifth-graders were observed during math and science, and the 28 eighth-graders were observed during first and second hour language arts. The purpose of this Observation Checklist was to observe student behaviors during instruction and work time. The Observation Checklist consisted of 14 different behaviors in which tally marks were used to show when each behavior occurred (Appendix C).

While completing the Observation Checklist, the teacher researcher's observed how much talking was happening during work time. Of the 73 students observed during the two-week period, there were a total of 494 target behaviors observed. The teacher researchers observed 140 (28%) incidences of talking during work time and 90 (18%) incidences where students could not

self-select free time activities. During instruction time, the teacher researchers noticed 66 (13%) incidences of talking during instruction. Talking during work time, lack of self-selection of free time activities, and talking during instruction totaled 59% of the 494 target behaviors that were observed.

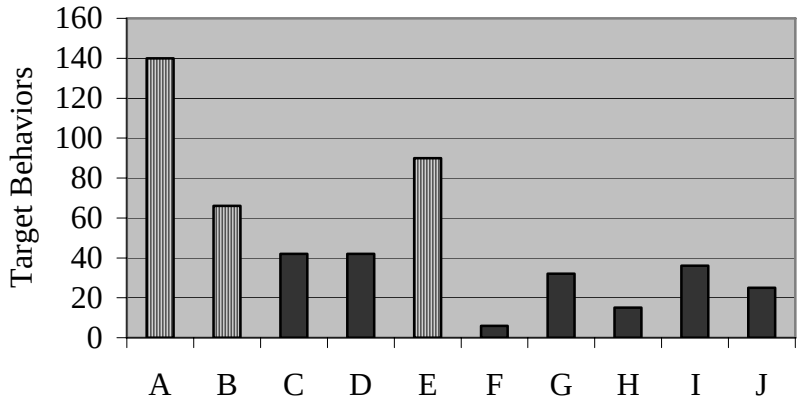

Figure 11: Observation Checklist (n=494)
Key: A = Talking during work time
B = Talking during instruction
C = Playing with objects
D = Making noises
E = Early finishers cannot self select free time activities
F = Disrespectful comments to one another
G = Working on other tasks/assignments
H = Rushing through work
I = Working slowly
J = Lacking enthusiasm

Summary

Based upon the tools described above, the data shows the students are positive and excited about school (Figure 6). Even though the students are excited, the data shows they do not feel their work is challenging (Figure 8). The data also shows that during work time, students are

easily distracted and are often bored after completing their assignments (Figure 7 and Figure 9). Most students have expressed the desire to select their own free time activities (Figure 10).

Reflection

After evaluating the data from our documentation tools, we gained insight about our students' feelings and our classroom environments. As teachers, we discovered that the majority of our students spoke positively at home about school (Figure 1). To us, this information is significant because one of the greatest challenges is getting students to like school and we have accomplished this. On the other hand, this data highlighted areas in need of improvement. The first area of concern is student distractions during work time. We feel work time plays a valuable role in student learning and retention. However, when 90% of the students are distracted, obviously, valuable learning is being lost (Figure 7). The data also showed that students did not feel challenged by their work, keeping their learning stagnate (Figure 8). As a result, some students quickly finish their assignments then become bored. In turn, these bored students create a distracting environment for their peers and provide behavior challenges for their teachers. After analyzing this data, we realize that we need to create a more motivating and challenging environment for our students.

With the help of this data, we realize that students feel frustrated in the classroom, because of distractions, lack of challenges, or boredom (Figures 7, 8, and 9). We teachers are not meeting students' individual needs. Some students desire a challenge, but instead are bored. Meanwhile, others are faced with not only academic challenges but also environmental obstacles. The data also overwhelmingly showed that students want to have a choice in their learning. They need to feel that they have a voice when it comes to classroom decisions. We feel the

combination of these issues interferes with not only the students' academic success, but also their development of a positive sense of self.

This data proves that our research project is valuable and necessary. The use of observation checklists allowed us to see, first-hand, the result of students' individual needs not being met. For example, in a two-week period we saw 140 incidences of talking during work time and 90 incidences where students could not self-select free time activities. To us, this proves that differentiated instruction is needed in our mixed-ability classrooms in order to improve student motivation.

Probable Causes

The present educational society is unparallel to that of the past. Today's educators encounter challenges not faced by those who preceded them. Past teachers were able to use district provided curriculum to meet educational standards (Anderson, 2007). Today, this is not the case. Most teachers are forced to develop their own curriculum to meet current educational standards because the district provided curriculum is outdated. With worries of high-stakes standardized tests, depleted funds for teacher training, diverse cultural and economic student backgrounds, and non-English speaking students, today's educators often feel overwhelmed and lose sight of each learner's exclusive educational needs (Ashman & Kraayenoord, 1998).

Instructional settings today are laced with obstacles that teachers cannot control. Present-day teachers are frustrated with standardized tests that require them to cover an unmanageable number of skills in an unreasonable amount of time (Bontempo, 1995). These time restraints leave little room for teachers to be creative in presenting lessons, which today's students need to be motivated. In most states teachers administer standardized tests in March; although, students still have at least two months to learn (DiMartino & Miles, 2005). Thus, forcing teachers to cram

in last minute lessons hoping students will retain the new information. If students' scores do not meet expectations of the current No Child Left Behind mandate, districts face serious repercussions. To avoid these consequences, many teachers are willing to participate in professional training and preparation, but lack of funding does not provide them with the opportunity (Lewis & Batts, 2005).

Not only do teachers feel the burden of state mandates, but also with the diverse nature of today's classrooms. The current classroom is no longer a homogeneous setting. Today's classrooms are melting pots of special needs students, gifted students, non-English speaking students, and moreover, students with diverse cultural and economic backgrounds (Tomlinson, et al., 2003). Along with teaching the academic curriculum, teachers are now expected to teach diversity education. Most teachers do not have the training they need; therefore, students' cultures are not accurately depicted. So, when student comes to school with these very diverse backgrounds, teachers struggle to find a balance between standardization and incorporation of each student's cultural needs (Scherer, 2000).

Along with lacking the authority to control high-stakes standardized testing and vast student diversity, teachers also cannot control classrooms occupied by mixed-ability students. However, they can control how they manage their mixed-ability classrooms by developing curricula that appeal to a broad array of learning styles and abilities. This task leaves some teachers feeling as if they are teaching multiple grades simultaneously. Educators carry the heavy burden of appealing to the vast learning ranges in their classrooms (Wehrmann, 2000). These learning ranges cause problems during teaching and assessments. Each student favors one or more intelligences. Therefore, the "one for all" approach to assessment is not authentic (Kane 1995). Teachers are pressured to have all students successfully complete standardized tests,

which forces them to create tests that mimic these tests throughout the year. This is a grave problem because standardized tests offer no personalized assessment (McTighe & O'Connor, 2005). This clearly poses a problem for educators who want each of their students to maximize their full learning potential.

Even though students are placed in mixed-ability classrooms, they still deserve quality instruction to meet their academic needs. When every child in a classroom is doing the same task, valuable learning is lost. Teachers cannot meet students' individual needs if every student is reading the same story and completing the same assignment. Typically, the only students receiving variety are special education students because generalizations are made that these students are the only ones who need modifications or additional resources to their instruction (Baglieri & Knopf, 2004). This is not true, regular education and gifted students also require adaptations. Unfortunately gifted students are too often used as tutors, instead of receiving the challenges they deserve in school (Willard, 2003). Each gifted students' potential is not fully reached unless they have a curriculum that allows them to individually excel (Callahan,1999). Though academic needs are important, they are not the only needs students have. If teachers do not fill students basic needs, then curriculum and instruction does not matter (Tomlinson & McTighe, 2006). Students long for independence, self-respect, real work, and engagement with adults. These crucial experiences are too seldom found in school (Marchese, 1998).

A current trend, ability grouping, is believed to meet students' individual needs. Ability grouping is a strategy that groups students based upon academic ability. It is thought that lower students need more discipline, a slower pace, less interaction, basic skills, and easier material, but this belief only keeps them at the low level (Tomlinson, 2006). Another belief is that higher students need a rapid pace, advanced material, independence, and higher level thinking.

However, this is not true for all gifted students (Tomlinson, 2006). Some teachers are beginning to realize that this type of grouping is doing more harm than good. They are noticing that they unknowingly assign students to being successful or unsuccessful. Students are beginning to catch on that the groups never change. It is not taking them long to identify whether they are placed in the low, medium, or high group. This leaves the lower grouped students with a diminished self-esteem and the higher grouped students feeling superior (Ashman & Kraayenoord, 1998). Therefore, grouping students based on ability provides no positive results (Tomlinson, 2001). All ability grouping does is damage students when they are tracked with certain labels and trapped into holding certain abilities (Benjamin, 2006).

For teachers who do not use ability grouping, most develop curriculum based around the average student (Tomlinson, 2001). This also causes a problem because the rest of the class can not learn the way the material is being taught. Teachers struggle, though, to accommodate all learners because they also have to think about the best way to teach the greatest amount of material, keep students engaged, and build a high amount of student retention (The Connecting Link, 2003). Teachers often do too much skill and drill and do not get kids involved in the learning (McTighe & O'Conner, 2005). Unfortunately, this means that students' interests take a back seat to teachers' interests.

If teachers neglect to develop curricula that appeal to mixed-ability students, boredom becomes a major obstacle in the classroom (Anderson, 2007). Boredom reduces achievement and attention and increases drop-out rates (Crump, 1995). Learners that are not given the opportunity to work at their optimal learning level will soon become frustrated, changing the outcome of their learning possibilities. The result of this problem is classrooms saturated with talented students not performing because they have been left in learning limbo.

Another problem in our schools today is low student motivation. Often when students are bored, they do not view education as purposeful or beneficial, resulting in low student attendance (Crump, 1995). Lack of educational success helps to develop the idea that education is worthless. Learners often steer clear of participating in activities in which they are unsuccessful (Margolis & McCabe, 2004). If a learner does not experience success often, they will soon withdraw from all educational activities. Educational focus should be on reigniting the will of our students. Teachers should strive to develop activities in which student enjoy and gain success. When students are motivated, there is a greater chance of engagement and retention of material (Vacca, 2006).

When students are not motivated, behavioral issues may present themselves a problem for educators. Research supports that these issues can stem from not only boredom, but also frustration, peer pressure, or simply just adolescent mood swings (Bru, 2006). However, it is proven that behavior issues are most likely to occur when a student expends much energy and fails (Bru, 2006). Students may react to teachers in an aggressive manner to avoid educational situations that produce stress due to low performance (Bru, 2006). These students will eventually join others who also experience failure and soon classrooms are flooded with frustrated, unruly students.

Boredom, low motivation, and behavioral issues can transform a classroom into an awfully uncomfortable place. When students feel uncomfortable in an educational setting, they feel reluctant to participate (Quay, 2004). A reluctance to join in can damage a student's academic self-esteem because the student is not receiving positive feedback from their teacher. Students, especially reluctant ones, require this positive interaction with their teacher to boost their academic self-esteem. One factor that contributes to poor academic self-esteem is negative

comments a student hears regarding their classroom performance (Ashman & Kraayenoord, 1998, p.51). These comments can be heard from both classmates and teachers. Teachers may have a difficult time eliminating negative comments verbalized by other students, but they can undeniably control the amount of negative comments they deliver. When hesitant students offer an answer that is not correct, teachers should still respond in an encouraging manner to persuade future participation. Experiencing negative comments and frequent failure will lead to poor academic self-esteem, lack of educational interest and stop success (Bru, 2006). According to Ashman and Kraayenord (1998), "Students with low academic self-esteem do not perform as well and are more self-conscious than students with a high academic self-esteem."

In addition to academic self-esteem, students, especially adolescent ones, are also concerned with another type of self-esteem. This particular self-esteem produces one's self-concept. Adolescent students generally have more on their minds than academic success and failure. During early adolescence, girls especially become aware of their image and try to fit into society. They struggle to find their true selves and not cave to peer pressure or become molded by others (Apter, 2006). Along with adolescent girls, adolescent boys also grapple to maintain a positive self-concept, however, this is not widely recognized (Hendel, 2006). Young boys struggle with trying to fit the masculine stereotype most accepted by society. As a result, they may act out due to their insecurities (Ashman & Kraayenoord, 1998). These academic self-esteem and self-concept issues will hinder student performance in the classroom.

In retrospect, teachers have numerous trials and tribulations facing them each day. Many of these are out of their control such as, standardized tests, lack of funds for teacher training, vast diversity of students, mixed-ability classrooms, and insufficient district curriculums. Even though these uncontrollable challenges overwhelm teachers, they are still looking for ways to

improve what they can control. This includes managing mixed-ability classrooms, eliminating ability grouping, updating curriculum, reducing boredom and increasing motivation, improving behavior, and raising self-esteem and self-concept. If teachers research strategies to best handle these controllable factors and face each day in the classroom with a positive attitude, possibly these trials and tribulations will become triumphs.

CHAPTER 3

THE SOLUTION STRATEGY

Review of Literature

Today's schools are in abundance of mixed ability classrooms instead of classrooms with just high, average, or low. So, teachers must meet the immediate needs of all learners so they can progress successfully (Tomlinson, 2000). Students need to feel a sense of belonging and have teachers see them as individuals with individual needs. When this happens, and the curriculum is based on interest, teachers will increase motivation, productivity, and achievement while meeting students' needs (Tomlinson et al., 2003).

Students come to school today with a plethora of needs, and some so overwhelming that teachers struggle to survive, but there is hope. If teachers take a positive approach and base the curriculum and teaching strategies based on students' needs, then students will soar to success. Teachers need to set up students for success especially for those activities in which they intend to fail (Margolis & McCabe, 2004). Students need to move at a pace that is suitable for them so they do not become bored or overwhelmed with the curriculum. Gifted children need to be exposed to quality levels of work so they do not feel worthless (Morelock & Morrison, 1999). Special education students need to be given meaningful work with a purpose in the regular classroom as well as the resource rooms. These student needs are just a few of the difficulties teachers face every day, but now through research, teachers are finding a new way of teaching that will help them overcome and rise above these challenges.

Differentiated Instruction will help teachers face classroom challenges because it is a proactive approach to improve learning for all students. Teachers can be proactive because they plan for varied ability levels instead of teaching to the middle and catching up students along the

way (Tomlinson, 2001). Differentiated Instruction is not a strategy, but a way of life in a classroom that uses a mix of various teaching methods (The Connecting Link, 2003). Differentiated Instruction benefits students with a wide range of levels, learning styles, and allows students to work at different speeds and abilities. As stated by Rettig, McCullough, Santos, and Watson (2003, p.5), "To succeed, students need both a rich learning experience and solid preparation to meet the required standards. A flexible and highly differentiated instructional program is the only viable approach to meeting the goal of success for all students." Many teachers disagree with Differentiated Instruction, because they have misconceptions. They believe it is individualizing instruction for each student, but that would be impossible in today's classroom. Differentiated Instruction is not individualizing the curriculum, but instead creating patterns of instruction.

Successful curriculums that utilize Differentiated Instruction can incorporate standards and diversity. The use of standards are one factor that help differentiation to work and also guide the curriculum (Scherer, 2000). Differentiated Instruction actually makes teachers align their objectives and teach to the standards because teachers need a starting goal. Once teachers have that goal, they can determine where students' starting abilities fall and then adjust the curriculum accordingly. Classroom instruction is another factor that influences how Differentiated Instruction is delivered. Teachers need to vary instruction in order to avoid predictability (Crump, 1995). Through Differentiated Instruction the content, process, and product can be modified (Johnson, 2001). This means that the teacher is tuned into a diverse student population, which has a variety of learning needs and accordingly changes the curriculum (Tomlinson & McTighe, 2006). Student learning will be impacted the most if the students are taught with a variety of learning strategies using a rich fast pace curriculum.

Implementing Differentiated Instruction exposes students to a variety of learning strategies and experiences, which helps them to be successful in our democratic society. Some teaching strategies that should be kept in mind when first using this technique are that differentiation should be done a little at a time and begin with a single subject or curricular element. As the school year moves forward, the teacher can gradually increase the class or content (Tomlinson, 2000). Differentiated Instruction requires the teacher to restructure their curriculum by adjusting content, creating whole group lessons, open ended lessons, and varying student responses (Johnsen, 2003). When this restructuring happens, the level of student engagement increases because students are working at their ability and interest levels. Teachers also need to make sure that students clearly understand their learning process through setting clear objectives and standards before they differentiate instruction (Scherer, 2000). Finally, Differentiated Instruction benefits all students by creating a reciprocal relationship between the content, teacher, and student. When this relationship is established, students will feel a higher engagement with the curriculum.

Differentiated Instruction will also allow students to feel engaged with the curriculum because it makes sure that the content and instruction match readiness levels, interests, and learning styles. Some of the factors that may be used to assess readiness levels are pre-tests, portfolios, interests, and multiple intelligences (Willard, 2003). Every student possesses their own readiness level and Differentiated Instruction allows students to build upon what they have already retained. Teaching to the middle no longer makes sense in the modern day classroom. For example, students in the low track learn as much or more when given the same high curriculum as the high track (Tomlinson, 2006). Also, students that are gifted and have learning disabilities (LD) need a curriculum that helps to improve and strengthen certain skills while also

allowing them to appeal to their higher intellect (Williams, 2005). As a result, there is no need to sacrifice high or low students when Differentiated Instruction can be implemented because each student's differences can be embraced (Tomlinson, 2006).

Embracing student differences and challenging each student at their level can be difficult. Through Differentiated Instruction, each student will be able to master critical skills while also gaining an education that challenges them. Differentiated Instruction allows for different learning rates and structuring tasks at different complexities. Each child has a Zone of Proximal Development (ZPD), which is the zone where students feel comfortable doing challenging work with support (Morelock & Morrison, 1999). Differentiated Instruction uses the ZPD to structure its activities so every student succeeds. Learning expands when the work is a little too hard but there is support to help students feel successful. Students need to learn at their interest and ability levels to achieve high levels of academic success and expansion. Challenging the gifted can be especially difficult for the classroom teacher, but differentiated activities allow for higher-leveled and open-ended questions. Differentiated Instruction works best for the all learners when teachers and students partake in a curriculum that is both challenging and also allows students to take responsibility for their own learning well beyond the classroom (Betts, 2004).

By giving students various choices and ways that they can work to learn together, all students will become engaged and take responsibility in the classroom (Baglieri & Knopf, 2004). Along with increasing engagement, student motivation can also be improved through Differentiated Instruction by giving students choices. Learners will invest in education if it interests them in content and skill. Differentiated Instruction gives students a chance to take a variety of paths that will ultimately lead to the same learning outcome. Giving students power to be involved in decision making allows them to participate in their preferred style of learning and

increases on-task behavior. Therefore, through the option of choice activities, boredom and frustration will become reduced (Anderson, 2007).

When teachers start Differentiated Instruction they need to make sure that students have enough choices in the curriculum and are not repeating old material in class so that students do not become bored or frustrated. Through their research, the teacher researchers have found many benefits to giving students choices. Allowing students to choose activities in the classroom creates a higher level of student thinking and gives students the opportunity to reinforce skills they may need to improve on (Hughes, 1999). The research has proven that tiered assignments, authentic assessments, and choices during free time give students choices based upon their learning preferences. Tomlinson is an advocate for setting up tiered assignments in order to reach all levels of student intelligence (1999). Tiered assignments allow the same objective to be obtained but at varied levels (Mawhinney, 2000). Meanwhile authentic assessments have students apply what they know in a new situation, which create a true learning experience. Students will also have the opportunity to select their own projects and be given a variety of questions types on assessments. Choices will provide empowerment and students will go toward the level that is best for them. Therefore, the student is provided with choices that help each individual learn as deeply and quickly as possible (Baglieri & Knopf, 2004). Learners will put forth greater effort and produce better work when given choices and variety (McTighe & O'Connor, 2005). Hopefully, when given choices, students will take more responsibility for their learning.

Many teachers, parents, and students believe that it is the sole responsibility of the teacher to make sure students learn, but the students also need to be held accountable. When students are held responsible for their own learning, their pride and motivation in school rises.

Differentiated Instruction helps with student responsibility through active learning, hands-on, cooperative learning, students' interests, and multiple intelligences. Differentiated Instruction is the way to find out who learns at what level, who needs support, how we can help the gifted, and how we can have separate but related lessons. When the curriculum appeals to the whole student, then the student will be able to self-monitor, be responsible, and motivated about their learning because their needs are being met.

Differentiated Instruction, when implemented effectively, can be a solution to managing mixed-ability classrooms, reducing boredom, increasing motivation, improving behavior, and can close educational gaps. Differentiated Instruction is a lot of work, but the students love it, frustration levels are lowered, and deeper understanding occurs (Scherer, 2000). Teachers need to embrace the differences in students and use them as an opportunity to differentiate instruction. This way of life in a classroom is an ongoing process and one that takes collaboration and dedication.

Project Objective and Processing Statements

As a result of Differentiated Instruction, during the period of September 10, 2007 through December 14, 2007, the students of Teacher Researchers A, B, and C, will increase motivation in a mixed ability classroom. The teacher researchers will show evidence of increased motivation by focusing on student's attitudes and off-task behaviors in the classroom.

The following tasks will be completed prior to implementing the intervention. These tasks will prepare the teacher researchers for their study.

- Create activities for free time choices.
- Manipulate classroom environment to create a central location for free time activities.
- Develop tiered assignments for upcoming units.
- Develop authentic assessments for upcoming units.

Project Action Plan

The action plan for the research project is designed to include strategies to improve student motivation in a mixed ability classroom using differentiated instruction. The following tasks will be completed during the three phases of the research project.

Pre-Week

August 27, 2007 – September 7, 2007

- Copy student surveys, parent surveys, parent consent and student assent forms, and observation checklists
- Distribute parent consent and student assent forms on August 27, 2007 and receive by September 5, 2007

Pre-Documentation

September 10, 2007 – September 21, 2007

- Distribute parent surveys on September 10, 2007 and receive by September 19, 2007
- Distribute student surveys during class on September 10, 2007
- Tally results of both surveys
- Complete student observation checklist during specific content areas

Intervention

September 24, 2007 – September 28, 2007

- Tally results of student observation checklist
- Introduce two choice items: tiered assignments and free time

October 1, 2007 – November 20, 2007

- Implement tiered assignments and free time choices
- Introduce and implement authentic assessments
- Create new choices of free time activities to keep interest and motivation
- Reflect on choice items and restructure as needed

November 26, 2007 – November 30, 2007

- Continue intervention
- Copy student surveys and observation checklists

Post-Documentation

December 3, 2007 – December 14, 2007

- Distribute student surveys during class on December 3, 2007
- Tally results of survey
- Complete student observation checklist during specific content areas
- Tally results of observation checklist

Methods of Assessment

There are two methods of assessment that the teacher researchers will use to document post-intervention data. These documents will be administered during the weeks of December 3, 2007 and December 10, 2007.

One of the assessment tools will be the observation checklist. The purpose of the observation checklist is to observe and record student behaviors during instruction and work time. Each day during this last phase, the teacher researchers will observe these behaviors during an 80-minute block of time during specific content areas. The data will be compared with the observation checklist data from the pre-documentation phase of September 10, 2007 through September 21, 2007. The behavior checklist includes 10 categories in which the teacher researchers will record the frequency of observed off-task behaviors by placing a tally mark in each appropriate box. The categories include talking during work time, talking during instruction, playing with objects, making noises, early finishers not self selecting free time activities, disrespectful comments, working on other tasks during instruction, rushing through work, working slowly, and lacking enthusiasm or complaining. See Appendix C.

The other assessment tool that will be used during post-documentation is the student survey. The purpose of the student survey is to understand students' attitudes towards their learning. The student survey will be distributed on December 3, 2007. Students will be asked to reflect upon their attitudes and behaviors during the past 10 weeks using the survey questions.

The data will be compared to the student survey data from the pre-documentation phase of September 10, 2007 through September 21, 2007 to see if any improvements in attitudes have occurred. See Appendix B.

CHAPTER 4

PROJECT RESULTS

This research project was developed to increase student motivation by reducing their boredom and frustration in the classroom. As teacher researchers, we noticed talking during work time, off-task behaviors, and students not being able to self select free time activities, which led us to believe that students had a lack of motivation. The teacher researchers chose Differentiated Instruction as an intervention to be implemented. Differentiated Instruction allowed early finishers to self-select their free-time activities. Along with choices, authentic assessments and tiered assignments were implemented. During the intervention, one of the third grade students moved, so the research results included 72 students, 21 third grade students, 23 fifth grade students, and 28 eighth grade students during the dates of September 10, 2007, through December 14, 2007.

Historical Description of the Intervention

During the pre-documentation weeks of September 10, 2007, through September 21, 2007, we distributed parent and student surveys, tallied survey results, and completed student observation checklists during selected content areas. Since these items were already created, it was very easy for us to administer and complete the first part of our research project. The parent surveys were returned to us in a timely manner, which was not anticipated, and we felt the results were positive and honest. The students were enthusiastic toward the idea of participating in our research project and willingly completed the survey. They asked many questions and seemed positive about the changes the project would bring into their classrooms. Once the surveys were collected, as expected we found tallying the results to be quick and effortless. Not all documentation tools went smoothly as expected. Filling out the observation checklist was

frustrating to all of us because we couldn't observe multiple behaviors, record them, and focus on our instruction simultaneously. Looking back, it would have been ideal for us to have a colleague record targeted behaviors. As this research project was unfolding, it was early in the school year. As teachers we know that students' normal behavioral patterns have not surfaced and they are not settled into daily routines and procedures. Therefore, we felt the data from our observation checklists may not have been accurate. Overall, the pre-documentation weeks went as anticipated with the exception of a few obstacles.

Our first week of intervention occurred during September 24, 2007, through September 28, 2007. During this week, we planned to introduce and implement free-time choices and tiered assignments. Unexpectedly, we realized the implementation of both would be overwhelming and decided to only focus on free-time choices, shifting tiered assignments to week two. During week one, and for the duration of the intervention, free-time choices were implemented in this way. Once students finished assignments, during designated work-time, they were given the opportunity to self-select free-time activities. These activities encompassed different content areas and appealed to the students' multiple intelligences. Each of us chose an age-appropriate method in order to implement this intervention. For example, the third grade students were given activity choice boards (Appendix D). Choice boards were set-up like a tic-tac-toe grid so students could eliminate activities as they completed them. The students kept their choice boards in their homework folders and pulled them out after they finished their assignments. All choices were stored in a designated "choice bin", which allowed students to independently retrieve their selected activity. Choices ranged from seatwork to hands-on activities, which could be completed individually or in small groups. We found only positive aspects with this first intervention. The students were enthusiastic toward the idea of choices. They enjoyed not being

told what to do if they finished early. We noticed an increase of on-task behavior and fewer incidences of talking during work-time occurred. Not only were the students excited, but we as teachers were as well. We found it easier than originally thought to put together choice items and liked the idea of students not relying on us to provide direction. By the end of this first week, we realized that this new routine allowed us to focus on struggling learners instead of off-task behaviors, which is something we did not anticipate.

During the second through the ninth weeks of October 1, 2007 through November 30, 2007, we implemented tiered assignments and authentic assessments, while continuing to offer new free-time choices. Tiered assignments allowed the same objective to be obtained at various levels and modalities. We created assignments that appealed to multiple intelligences ranging from simple to complex. Each student chose the assignment that best suited his or her needs. For example, eighth grade language arts students are required to read up to 550 pages of various genres of text and present a summary of what they have read. Instead of being limited to one form, the students had a choice in the way they presented their summary. The first choice included the use of a graphic organizer which helped the students to answer who, what, where, when, and why questions and organize the information into a summary paragraph (Appendix E). A book talk served as the second choice. The students who selected this option completed the book talk form and then presented their information to the entire class (Appendix F). The final assignment option was a typical book report form requiring the students to analyze the setting, characters, plot, conflicts, and their reflections about the text (Appendix G). With this part of the intervention, we did not find as many positive aspects as we had hoped for. We found that the students really enjoyed choosing their assignments. Most of them chose the best assignment for their level and learning style. We noticed that the students were excited with the new way of

offering assignments because this was a new experience for them. However, over time, the newness wore off and tiered assignments became another classroom routine. Also, some students became quite clever and figured out that some assignments were easier for them to complete than others. We had to pay careful attention to the assignments the students were choosing, because of this. Over time, the newness also wore off for us, and the tiered assignments became more difficult to implement than anticipated. We found it to be time consuming developing and preparing the tiered assignments. We did not notice an increase in motivation or a reduction in boredom for the majority of this intervention, which was not expected. We think this happened because work is work and most students did not want to do it no matter how exciting we tried to make it.

The third intervention we implemented during this timeframe was authentic assessments. Authentic assessments are culminating activities and tests targeting learning styles, multiple intelligences, and ability levels. Even though authentic assessments provide many options, the teacher is still testing a uniform objective. For example, at the end of a fifth grade science unit, the students were given a test (Appendix H). The test consisted of many different options and choices for the students to show what they had learned. These choices appealed to their learning styles and multiple intelligences. Once again, there were not as many positives as we had hoped for with this intervention. The students did enjoy having a choice on the assessments, and they knew which test option was right for them. However, at times, we found it hard to develop more than one appropriate choice to assess the objective. On occasion this led to assessments including choices that did not allow students to appropriately demonstrate their knowledge. Since the choices were not developed appropriately, after grading the assessments we were still unsure if students had mastered the objective. During this intervention we noticed patterns developing in

the students' choices. Some students would often pick the same type of choice because it became a comfortable option for them, instead of challenging themselves by choosing something different. Overall, we were disappointed with the authentic assessment portion of this intervention.

As Teacher Researcher A in the third grade classroom, I have learned a lot about implementing an action research project and interventions in my classroom. The first lesson I learned is that we tried to do too many Differentiated Instruction interventions at one time. Not ever participating in an action research project before, I had no idea how time consuming it would be. I also realized how difficult Differentiated Instruction interventions could be to implement because of the thought and effort of the teacher to make it work. Another lesson I learned was to be more organized with documentation during the intervention stage. It was extremely hard to step back from being a teacher into the researcher role. I want to continue to use the Differentiated Instruction strategies and will do a better job implementing them now that I have experience. I believe these strategies are perfect for my third grade classroom and I am glad that I had a chance to experiment with them.

As Teacher Researcher B in the fifth grade classroom, I would like to reflect upon my personal experiences with this action research project. Since I have never completed a process such as this, I learned a lot about research projects and the implementation of them. One of the most important lessons I learned was to start small. Being new to this type of research, I didn't realize that I was getting in a bit over my head. I do not regret choosing Differentiated Instruction as my intervention because it was needed in my classroom. However, instead of choosing to focus on free-time choices, tiered assignments and authentic assessments, I should have selected one strategy and focused all of my attention only to that. This project has allowed

me to grow into a more aware and reflective teacher. I pay closer attention to the individual needs of my students, brainstorm how to best help them, and reflect upon the strategies I have used. I will continue to implement Differentiated Instruction in my classroom, but one step at a time.

As Teacher Researcher C, in the eighth grade classroom, I have learned quite a lot about Differentiated Instruction and also teaching to various multiple intelligences. Throughout the action research project, I have found some benefits in my classroom and also stumbled across challenges along the way. The portion of the project that I found really worked out well was the implementation of tiered assignments. In the beginning of the action research project, students enjoyed being given a choice in their assignment. Most of the time students chose assignments that were appropriate for their ability level. However, sometimes students did lapse into a pattern of choosing an assignment that was not exactly at their ability level. Another portion that I enjoyed implementing the classroom were giving students choice activities. Towards the beginning, students were motivated and would become excited about having the opportunity to partake in free time activities after they were done with their classroom work. As the project continued, creating choices became more challenging and time consuming. I will continue to utilize Differentiated Instruction but have learned that it should be implemented in a series of smaller steps, in order to be effective in the classroom.

Presentation and Analysis of Results

The teacher researchers collected their post-documentation evidence through a Student Survey and an Observation Checklist. The post-documentation data was collected on 72 students including 21 third-grade students, 23 fifth-grade students, and 28 eighth-grade students. During the week of December 3, 2007, a Student Survey (Appendix B) was administered to the targeted

students with the purpose to identify if a change had occurred in the students' feelings towards their learning. During the weeks of December 3, 2007, and December 10, 2007 the teacher researchers also used an Observation Checklist (Appendix C) with the targeted students with the purpose to identify if a change had occurred with student behaviors during instruction and work time.

Student Survey

The purpose of this survey was to assess students' academic motivation at school. The Student Survey included five questions, four of which were Likert-scale questions. The scale provided choices of always, sometimes, and never. One question provided a yes or no choice (Appendix B). This survey was administered to 72 students in each teacher researcher's classroom during the week of December 3, 2007, including 21 third-grade students, 23 fifth-grade students, and 28 eighth-grade students (n=72). Of the 72 surveys administered, 100% (n=72) were collected.

During post-documentation of question one, the teacher researchers noted that of the 72 student surveys completed, 23% (n=16) of the students were always excited about school. The researchers also noted that 14% (n=10) of the students were never excited about school.

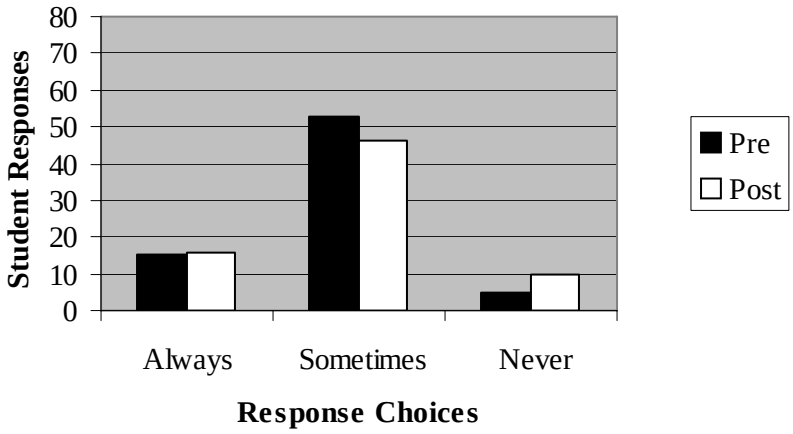

Figure 12: Changes in Excitement Toward Learning (n=145)

As summarized in Figure 12 above, the teacher researchers observed from pre to post documentation that there was not a significant change. The data revealed a 7% increase (n=5) in students never being excited about school.

During post-documentation of question two, the teacher researchers noted that of the 72 student surveys completed, 83% (n=60) of the students stated that they were always or sometimes distracted during work time.

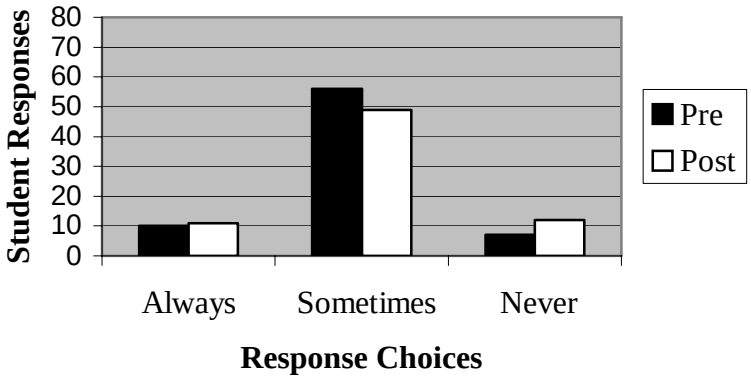

Figure 13: Changes in Work Time Distraction (n=145)

As summarized in Figure 13 above, the teacher researchers observed from pre to post documentation that there was an increase in students who were never distracted. The data revealed a 7% increase (n=5) in students who were never distracted.

During post-documentation of question three, the teacher researchers noted that of the 72 student surveys completed, 73% (n=53) of the students stated that their work was always or sometimes hard.

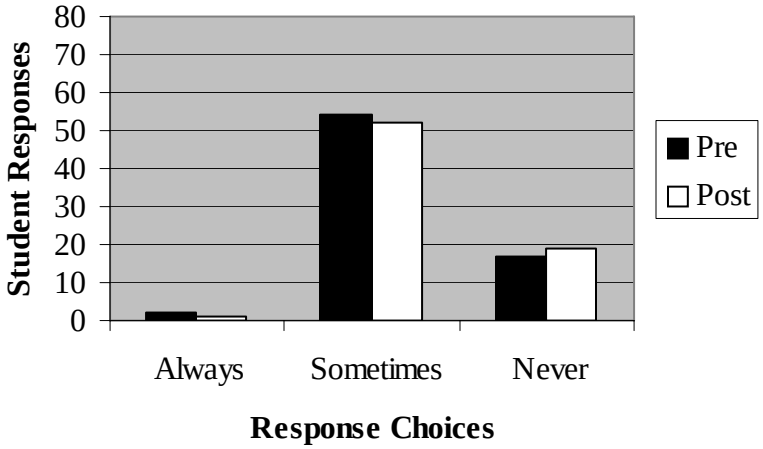

Figure 14: Changes in Difficulty Level of Work (n=145)

As summarized in Figure 14 above, the teacher researchers observed from pre to post documentation that there were no notable changes.

During post-documentation of question four, the teacher researchers noted that of the 72 student surveys completed, 75% (n=54) stated that they were always or sometimes bored when they finished their work.

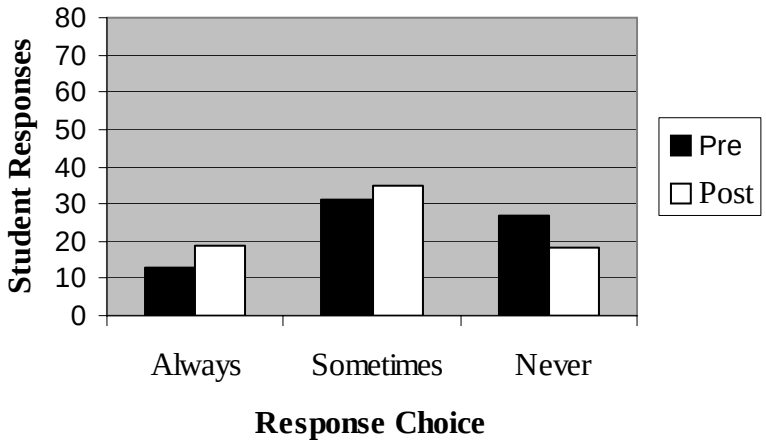

Figure 15: Changes in Boredom After Work Completion (n=145)

As summarized in Figure 15 above, the teacher researchers observed from pre to post documentation that there was an increase in the number of students who were always or sometimes bored. The data revealed a 15% increase (n=10) in students that they were always or sometimes bored when they finished their work.

During post-documentation of question five, the teacher researchers noted that of the 72 student surveys completed, 93% (n=67) stated that they would like a choice in the kind of work they do.

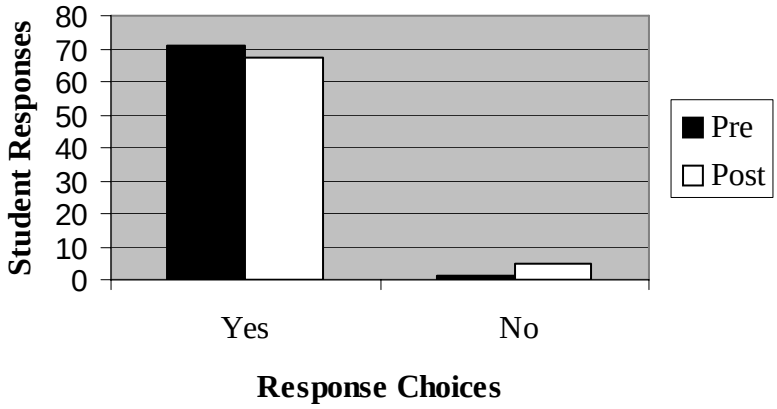

Figure 16: Changes in Students' Desire to Choose (n=145)

As summarized in Figure 16 above, the teacher researchers observed from pre to post documentation that there was a decrease in students who wanted a choice in the work they do. The data revealed a 4% (n=4) decrease in students who wanted a choice in their work.

Observation Checklist

The purpose of this Observation Checklist (Appendix C) was to observe student behaviors during instruction and work time. The Observation Checklist consisted of 10 different behaviors in which tally marks were used to show when each behavior occurred. The Observation Checklist was completed in each teacher researcher's classroom during the weeks of December 3, 2007, and December 10, 2007, by observing 21 third-grade students, 23 fifth-grade students, and 28 eighth-grade students (n=72). The 21 third-grade students were observed during math and social studies, the 23 fifth graders were observed during math and science, and the 28 eighth-grade students were observed during first and second hour language arts.

During post-documentation of the Observation Checklist, the teacher researchers noted that talking during work time (n=97; 28%) and that early finishers cannot self select free time activities (n=79; 23%) were the most frequently observed behaviors.

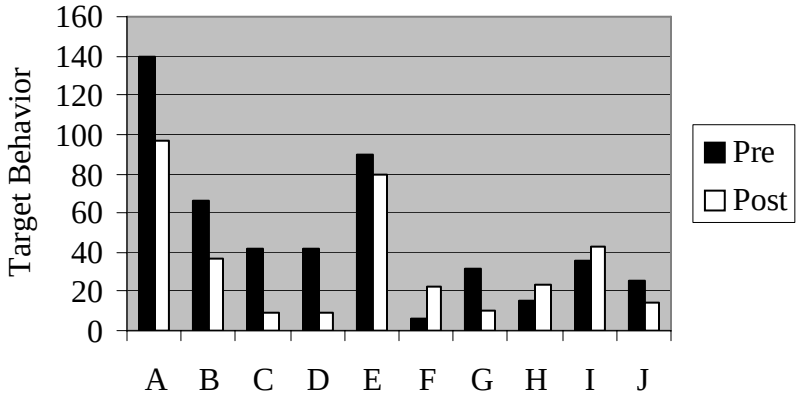

Figure 17: Changes in Target Behaviors (n=837)
Key: A = Talking during work time
B = Talking during instruction
C = Playing with objects
D = Making noises
E = Early finishers cannot self select free time activities
F = Disrespectful comments to one another
G = Working on other tasks/assignments
H = Rushing through work
I = Working slowly
J = Lacking enthusiasm

As summarized in Figure 17 above, the teacher researchers observed from pre to post documentation that the percentage of incidences of talking during work time did not decrease, but the total number of incidences of talking during work time decreased by 43. The teacher researchers also observed that the number of incidences of talking during instruction also decreased. The total number of incidences decreased by 29, showing a percentage decrease of 2%. The total number of incidences of early finishers not being able to self select free time activities decreased by 11 incidences, which had a percentage decrease of 5%.

Conclusions and Recommendations

As we surveyed the pre and post data we did not find as many notable changes as we had hoped for. Figure 12 showed a 7% (n=5) increase in students never being excited about school. We were expecting that students would be more excited about school at the end of the intervention. However, we know as teachers that students lose interest quickly. We were hoping these interventions would at least have maintained the excitement the students started the school year with. The data in Figure 13 showed a 7% (n=5) increase in students who were never distracted. Once again this is an increase, however not as significant as we had wanted. Fewer distractions mean that more students are on task, but we are concerned that 83% (n=60) of students are still distracted. These interventions did not diminish the problem of off-task behavior, so we could not focus as much on struggling learners. In Figure 14, there were no notable changes in how students felt about the difficulty of their work. We feel this happened because students were selecting tiered assignments that were too easy for them to complete. We tried to monitor what the students were selecting, but we found it difficult to find a simple method of tracking their choices. The data in Figure 15 showed a 15% (n=10) increase in students who were always or sometimes bored. The free time choices were supposed to alleviate boredom, however early finishers moved too quickly through the choices because they were not challenging enough. We did not change the choices as frequently as we should have because we did not want the slower workers to miss the opportunity to participate in those activities, but this only hindered the early finishers. In Figure 16, there was a 4% (n=4) decrease in students who wanted a choice in the kind of work they do. This was a huge surprise to us and not expected. It is a possibility that the students who changed their mind were the slower workers. They could have felt left out; therefore developing negative feelings toward the free time choices. Even

though most of our data has been negative, the observation checklist did show some positive outcomes. We saw fewer incidences of negative behavior. During the pre-documentation phase of the Observation Checklist, talking during work time, talking during instruction, and self selecting free time choices accounted for 292 (59%) of all incidences recorded. Since these three behaviors accounted for the majority of off-task behaviors, our goal was to decrease the number of incidences in these three areas. During the post-documentation phase these three targeted behaviors did in fact decrease in incidences (n=213). Students did not talk as much during work time or instruction, and most of them did do a better job selecting free time choices than before the intervention. We were disappointed that the number of slower workers increased and that more students were rushing. We feel that most elementary students do not fully understand their learning style; therefore at times are unable to make good choices without guidance.

Although the data provided negative feedback, we still conclude that the intervention of Differentiated Instruction was worthwhile. We feel that to best meet the individual needs of learners, some aspects of Differentiated Instruction should be included as part of the curricula. In our classrooms, we will continue to implement Differentiated Instruction. However, some alterations to our original plan will be made. Once we were fully immersed in our project, we realized that we had taken on too many aspects of Differentiated Instruction. We found it difficult to continuously generate new choice items, select valuable tiered assignments, and create authentic assessments. To successfully continue this intervention we recommend offering choice items, but making some modifications. These modifications will include changing the choice items more frequently, while giving students the opportunity to select previous activities as well. Hopefully this will restore students' desire to have a choice. We also recommend making modifications to the tiered assignment and authentic assessment components. Instead of

offering tiered assignments for every lesson, we are going to evaluate our lessons more closely and only offer tiered assignments when we feel they are most beneficial. We have realized that every assignment does not need to be tiered. Limiting tiered assignments will also help us monitor students' choices to make sure they are challenging yet level appropriate. There are still many occasions that uniform assignments will service the learners' needs and tell us what they have learned. We also recommend making small adjustments to the way authentic assessments are implemented. Instead of offering only tests with various response choices, we would also recommend offering multiple projects as a form of assessment.

If we were to do this project again, we would implement only one aspect of Differentiated Instruction, free-time choices. Since we are not yet Differentiated Instruction experts, we feel that it would be most beneficial to select a simple component, such as free-time choices and master that component before we attempt to implement any others. We would also evaluate our documentation tools more closely. Some of the parent survey questions and response choices we selected did not provide us with specific enough information. For example, the options of sometimes and unsure did not provide us with clear data. Next time, we would eliminate these choices and provide more free response questions. We also included too many target behaviors on our observation checklist. We found it difficult to watch for these behaviors, record them, and successfully manage our teaching. After reviewing this data, we realized it would have been more beneficial to target positive behaviors rather than negative.

In retrospect, this action research project brought about many trials and tribulations, but we still feel that we impacted our classrooms in a positive way by taking a proactive approach using Differentiated Instruction strategies and interventions.

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APPENDICES

Appendix A: Parent Survey

9/11/2007

Dear Parent(s)/Guardian:

I am currently enrolled in a graduate program through Saint Xavier University that requires me to complete an action research project in my classroom. The purpose of the survey is to examine your child's academic motivation at home and at school. **Please remember, by filling out this survey you are consenting to participate in this study.** If you choose to do so, your results need to remain entirely anonymous, therefore do not write you or your child's name on this survey. Simply detach the survey portion and return it to school with your child by September 19, 2007. I am hoping you will assist me in this adventure by completing the parent survey below. Thank you for your assistance!

Mrs. Smith

Please circle the appropriate description to show your feelings about each statement.

1. My child speaks positively about school subjects:

   Always Sometimes Never Unsure

2. I feel my child is often bored in school:

   Always Sometimes Never Unsure

3. I work with my child on homework ____ day(s) a week.

   5 4 3 1 0

4. When helping my child with homework, **my** frustration level averages:

   Very High High Medium Little None

5. Current homework assignments challenge my child:

   Always Sometimes Never Unsure

Appendix B: Student Survey

My Feelings About Learning

Please circle one response that shows how you feel about each statement. This survey must remain anonymous, therefore do not write your name anywhere on this paper ☺

1. I am excited about learning in school.

Always  Sometimes  Never 

2. I get distracted during work time.

Always  Sometimes  Never 

3. My work is too hard.

Always  Sometimes  Never 

4. I feel bored when I finish my work.

Always  Sometimes  Never 

5. I would like to have a choice in the kind of work I do.

Yes  No 

Appendix C: Observation Checklist

Observation Checklist

Behaviors	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10
Talking during work time										
Talking during instruction										
Playing with objects										
Making noises										
Early finishers cannot self select free time activities										
Disrespectful comments to one another										
Working on other tasks/assignments during instruction										
Rushing through work										
Working slowly										
Lacking enthusiasm toward task/complaining										

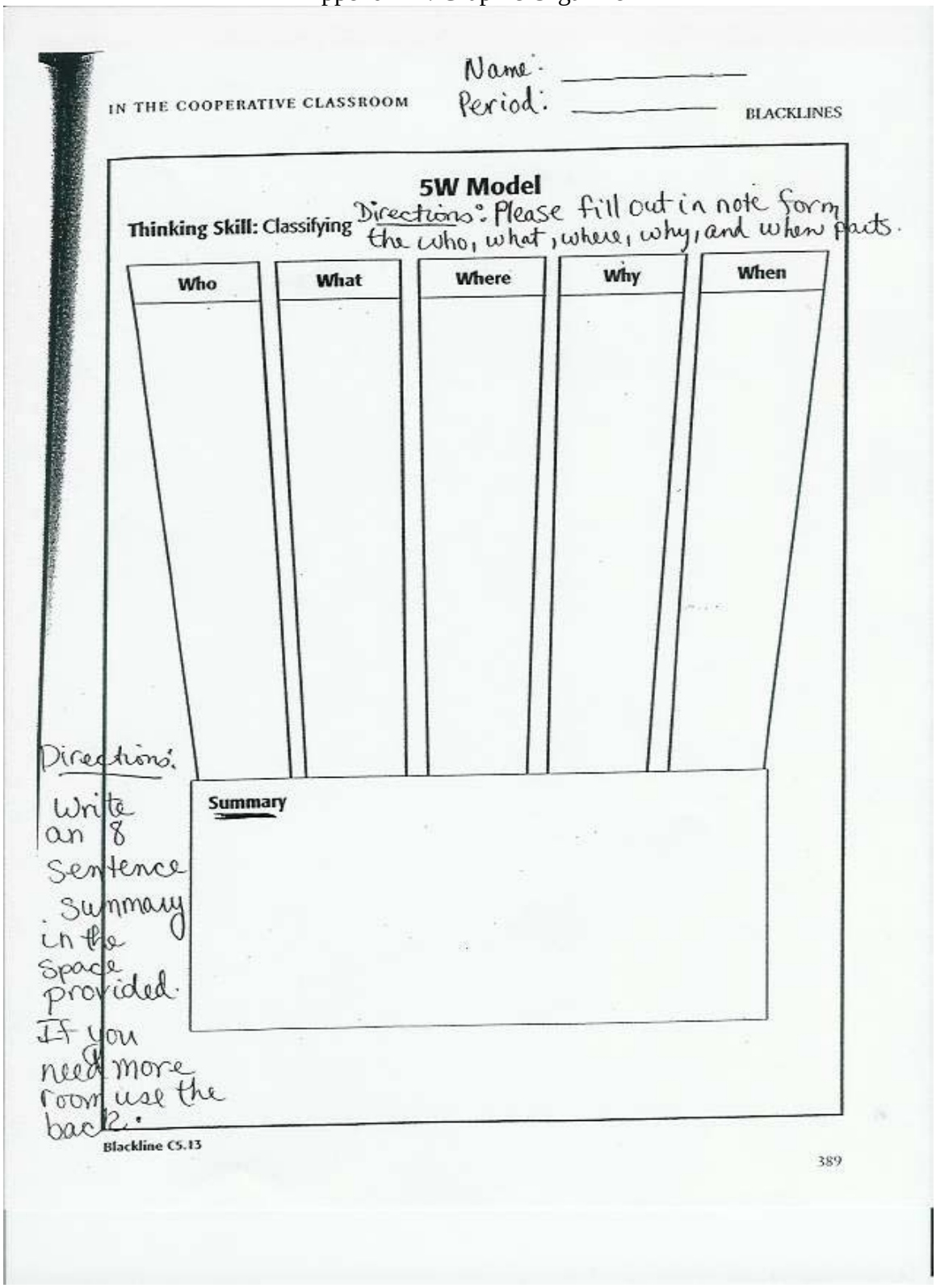
Appendix D: Choice Board

CHOICE BOARD

DIRECTIONS: Pick an activity during your free time. All the activities are for you to do alone and quietly. There are many choices so you should always have something to do.

READ A.R.	READ OTHER BOOKS/MAGAZINES	BOOK REPORT
PHONICS SHEET	GRAMMAR SHEET	MATH SHEET
WRITE A STORY	WRITE A LETTER	JOURNAL
MATH GAMES	MATH FACTS	ALPHABETICAL ORDER
DICTIONARY SKILLS	READING ACTIVITY SHEETS	JOBS (IF YOU HAVE ONE)

Appendix E: Graphic Organizer



Name: _____

Period: _____

IN THE COOPERATIVE CLASSROOM

BLACKLINES

5W Model

Thinking Skill: Classifying

Directions: Please fill out in note form the who, what, where, why, and when parts.

Who	What	Where	Why	When

Summary

Directions: Write an 8 sentence summary in the space provided. If you need more room use the back.

Blackline C5.13

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Appendix F: Book Talk

Name_____
Date_____
Period_____
Quarter_____

Book Talks

Directions: Please sign-up for book talks on Friday. You can only sign up for one per quarter. This sheet must be filled out to turn in and you will be able to use this sheet for your presentations. (30 points)

Name of the Book_____Page Total_____

1. What is the genre of this book? (Fiction, non-fiction, fantasy, mystery, adventure, romance, young adult, horror, etc.) ***2 points**

   _____

2. Be ready to discuss and talk about the main characters and the plot (main order of events) Please use the space below to take some notes...

3. Write a 6 sentence paragraph critiquing why you liked or disliked the novel. I would also like you to include in this paragraph one part of the novel that made you relate to a character/incident, an analysis of a strong emotion that the author made you feel from their word choice, or any other part of the novel that especially stuck out to you (in a positive or negative way.) **Every sentence that you write in this paragraph must contain support that explains why you feel the way that you do about the novel. *6 points—You may use the back of this paper to write the paragraph—Either you can read the paragraph to the class or you can discuss the paragraph**

Appendix G: Book Report

Name_____
Date_____
Period_____
Quarter_____

Unlock the Mystery of a New Book

8th Grade Book Review—30 points

If you enjoyed the book share the title on the board with others!

Name of the Book_____

Author_____ Number of Pages_____

Publisher_____ Copyright Date_____

1. What is the genre of this book? (Fiction, non-fiction, fantasy, mystery, adventure, romance, young adult, horror, etc.) *2 points

_____

2. Briefly list the main characters in the novel and then write a 1-2 sentence description for each character. I would like you to describe each character with some original adjectives. *12 points

Character:_____

1-2 Sentence Description:_____

_____

_____

_____

Character:_____

1-2 Sentence Description:_____

_____

_____

Character: _____

1-2 Sentence Description: _____

_____

_____

_____

Character: _____

1-2 Sentence Description: _____

_____

_____

_____

*If there are more than 4 main characters attach a separate sheet of notebook paper to your book report and label it ***Question #2 Continued.***

3. **Write the conflict (problem) and resolution (how the problem was resolved) in 1-2 complete sentences. *4 points**

_____

_____

_____

4. **Write a 6-sentence paragraph describing the plot in order of the sequence of incidents. *6 points**

5. **Write a 6 sentence paragraph critiquing why you liked or disliked the novel. I would also like you to include in this paragraph one part of the novel that made you relate to a character/incident, an analysis of a strong emotion that the author made you feel from their word choice, or any other part of the novel that especially stuck out to you (in a positive or negative way.) Every sentence that you write in this paragraph must contain support that explains why you feel the way that you do about the novel. *6 points**

STAPLE THE PARAGRAPHS TO QUESTIONS 4 AND 5 ON A SEPARATE SHEET OF PAPER TO THIS HANDOUT. THANKS!

Appendix H: Science Test

Space Unit Assessment

Name: _____

Section 1: vocabulary (4 pts.)
Complete each statement by determining the appropriate word.

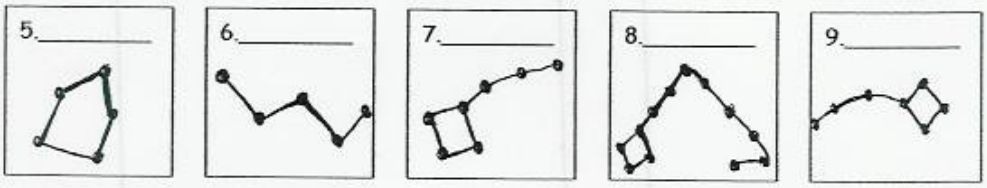
Word Box (hint: not all words will be used)

star	comet	myths	sun
meteorite	constellation	meteors	

1. A _____ is a group of stars that forms a pattern in the night sky.
2. A huge globe of hot gases that shines by its own light is known as a _____.
3. A _____ is an icy ball of dust and rock that travels in an elliptical pattern around the sun.
4. _____ are also known as shooting stars.

Section 2: Constellations (8 pts.)
Examine then name each constellation and answer the questions that follow. Choices below

Draco Cassiopeia Ursa Minor
Cepheus Ursa Major



10. Explain why Cassiopeia is upside down. _____

_____.

11. Which constellation contains Polaris? _____
*Now, go back to the previous page and circle Polaris in that constellation.

Section 3: The Moon (6pts.)
Evaluate each statement. If the statement is true, write T on the line. If the statement is false, write F on the line and correct the statement to make it true.

12. _____ The moon has an atmosphere.
13. _____ We always see the same side of the moon.
14. _____ The moon has extreme temperatures.
15. _____ The moon does not affect the tides.
16. _____ There is only one moon phase.
17. _____ The moon rotates on its axis and revolves around Earth.

~18. Differentiate between a solar and lunar eclipse (8 pts.)
You can *either* write a written response or create an image that illustrates the differences.

Written Response

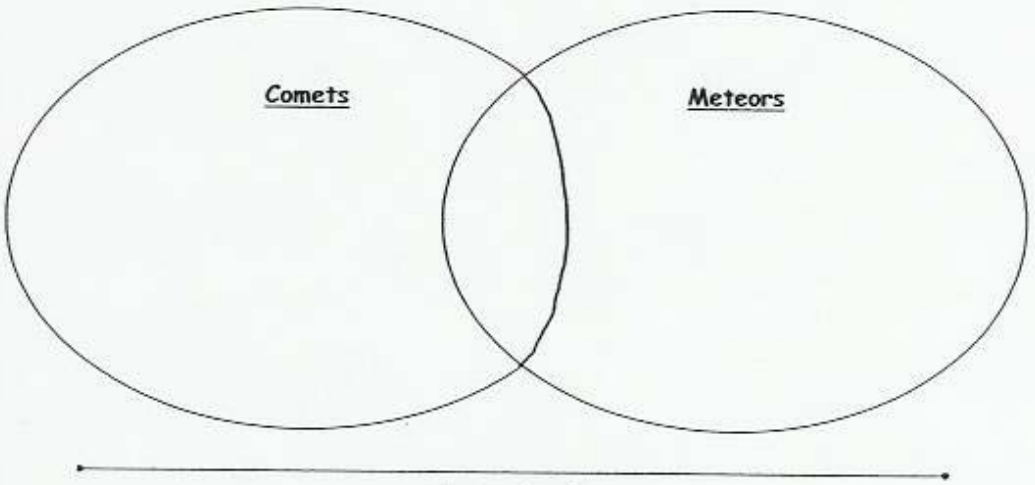
or

Image

Section 4: Comets and Meteors (8 pts.)

~19. Compare and contrast comets and meteors through *either* a written response or by completing the Venn diagram.

Written Response



Extra Credit

Choose one or both (3pts. each)

1. Draw an accurate representation of a constellation of your choice (must be one that is not on the test).

2. Recall your knowledge of lunar eclipses and predict when the next lunar eclipse will occur. _____