This report describes a program to improve inappropriate behavior of targeted fifth and sixth grade classes in an elementary school in northern Illinois. Seventeen percent of the school population is identified as low-income, although the community is experiencing a rapid increase in residential and commercial growth. Time-off task, incomplete assignments, and disruptive behavior were documented. Analysis of probable cause data reveals that students lack initiative, social skills, and commitment, and that students view school as irrelevant. Parental values and economic conditions may be contributing factors. In analyzing instructional strategies and curriculum, failure to engage students in their own learning may also be problematic. After reviewing professional literature and evaluating the classroom setting, a decision was made to select two interventions: (1) design a series of learning activities addressing multiple intelligence theory; and (2) incorporate those activities utilizing cooperative learning. Two out of the three problematic behaviors showed significant improvement. Time-off task and disruptive behavior in the targeted classrooms improved. Reduction of the number of incomplete assignments did not improve significantly. (Contains 26 references.) (Author)
IMPROVING BEHAVIOR THROUGH MULTIPLE INTELLIGENCES

by

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ABSTRACT

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Chapter 1

PROBLEM STATEMENT AND CONTEXT

General Statement of Problem

At an elementary school located in northern Illinois, students' time-on-task, classroom behavior, and assignment completion needs to improve as measured by teacher assessment and documentation of assignments, anecdotal notes, and observation checklists.

Immediate Problem Context

There are 511 students enrolled in the targeted school. The targeted school is a fourth through sixth grade magnet school which was opened in the 1991-1992 school year. The school was created as a result of school closures and the introduction of the magnet school concept. Students throughout the district were chosen for the programs based on application, teacher recommendation, test scores, and parental approval. The targeted school also houses the neighborhood students for grades four, five, and six. At each grade level there are five heterogeneously grouped classes. There are also three homogeneously grouped classrooms at each grade level; one called Children At Risk Educationally (C.A.R.E.), one gifted class, and one talented fine arts class. The student population is 91.8 percent White, 2.3 percent African-American, 4.1 percent Mexican-American, 1.6 percent Asian, and 0.2 percent Native American (Harlem Report Card, 1994). English is the only language spoken at the school.
The school has a faculty of 40 teachers. There are 15 regular education teachers for grades four, five, and six. Each grade level has a teacher for the gifted students, a teacher for the C.A.R.E. program, and teacher for the talented and fine arts students. In addition to these staff members, the school has a teacher of Chapter One, a teacher of Learning Disabled (L.D.), Behavioral Disordered (B.D.), and Educable Mentally Handicapped (E.M.H.), an art teacher, band instructor, two music teachers, a part-time dance instructor, a teacher for the learning center, three physical education teachers, and three half-time reading tutors for the C.A.R.E. classes. A diagnostic team consisting of two part-time speech clinicians, a school psychologist, a nurse, and a social worker are also available on a half-time basis. At the administrative level, there is a full-time principal. Three intervention programs are offered with trained personnel to assist students in coping with alcohol, family, emotional, physical abuse, as well as conflict management.

The office staff consists of one full-time secretary and six aides who assist teachers and administrators in playground supervision, duplication, and in other clerical duties. The school also houses the K-3 teacher of the gifted, the district curriculum coordinator, and a secretary for the coordinator. The school has two food-service employees and two full-time custodians. An active Parent Teacher Organization complements the staff.

The school was formerly a middle school consisting of grades seven and eight. Having been a former middle school, it is larger than most elementary schools in the district. It has facilities such as: a cafeteria with a hot lunch program, a full-size gymnasium with bleachers and stage, acoustically sound band and choir rooms, and a fully-equipped art room.
The Surrounding Community

The school district serves two suburban communities of 33,000 residents. The district is located adjacent to the second largest city in Illinois.

In Suburb A, 74.1 percent of the residents have completed high school, and 5.5 percent have a bachelor's degree or higher. In Suburb B, 78.3 percent of the population have completed high school, with 10.7 percent attaining their bachelor's degree or higher. The median income in Suburb A is $33,791 and in Suburb B it is $31,147. The per capita income for Suburb A is $12,354, and in Suburb B it is $13,863 (Census of Population and Housing, 1990).

The community is experiencing gradual residential and commercial growth, primarily due to the development of open land throughout the northern part of the school district. Boundary lines have been re-drawn to accommodate this growth. An elementary school reopened in 1994. A Junior High school is being renovated to house more students and a new technology center for the projected 1995-96 school year (Harlem, 1994). The population being concentrated in a specific area allows the district to provide bus service to neighborhood schools with students having to spend minimal time riding school buses. Transportation services are provided to all students living more than one and a half miles from school. Students who have to cross a major highway between home and school are also offered bus services.

The student population of the district is 6,306. Of the 6,306 students, 92.7 percent are White, 2.3 percent are African-American, 3.6 percent are Mexican-American, 1.1 percent are Asian, and 0.3 percent are Native American (Harlem Report Card, 1994).

There are 416 teachers in the targeted district; 72.6 percent are female, and 27.4 percent are male. Ninety-nine point seven percent of the teachers are White
and 0.3 percent are Asian. There are no Mexican-American, African-American, or Native American teachers. The average teaching experience for teachers in the district is 17.3 years; 50.6 percent have a master's degree (Harlem Report Card, 1994).

There are two elementary (K-3) schools, five elementary (4-6) schools, and one magnet (4-6) school each having their own principal. All elementary schools feed into one middle school (7-9) that feeds into one high school (10-12). The middle and high schools have their own principals and vice principals. An elected school board, consisting of seven members, meets monthly to decide educational and financial matters.

Regional and National Context of Problem

There are approximately 45,000,000 elementary and secondary school students in the United States. All of them have special needs and interests that influence the way they learn. And, many have problems. While some problems and concerns are a sign of the times—unique to a new generation and a new society—there are the all too familiar ones such as discipline, which many educators feel has taken over the classroom (Myrick, 1991).

According to Gallup polls (1994), the public believes that the answer to many of the problems that plague schools is improved discipline. According to these same polls, teachers rated classroom management and discipline as their number one concern (cited in Everston and Harris, 1992). "A majority of teachers and law enforcement officers believe that the major factors contributing to violence in the public schools include lack of supervision at home, lack of family involvement in the schools, and exposure to violence in the mass media" (Gallup, 1994, p. 43).

Everston and Harris reported in 1992 that teachers today are faced with increasing numbers of special education students, bilingual students, crack
babies, economically disadvantaged youth, and children from single-parent families. Teachers must now address myriad sociological, psychological and educational problems that were non-existent when many veteran teachers took their educational methods courses in college (Burke, 1992).

Regardless of improvements in college educational courses, however, the realities of the public school system in America are taking their toll on thousands of beginning and veteran teachers.

According to Moynihan (1993/1994), talking and interruptions are scaled down to become part of a normal teaching day. The natural tendency of children is to test the limits of authority. Once it is established that it is no big deal to curse at a fellow student, why not resort to violence and see what happens? If it is no big deal to hit a fellow student, how about cursing out a teacher? If you can get away with swearing at the teacher, what about slugging her/him? The experiments will continue, until the limit is reached. According to Albert Shanker (1994):

There is no point in talking about meeting world-class education standards-or even improving student achievement-unless there is order in the schools. It is obvious that students can't concentrate on their work if they are worried about being intimidated in school. Disruption is far more common than violence in our schools, and it's routinely destructive to learning. All you need is one kid who sits in the back of the room shouting put-downs at other students to guarantee that very little learning takes place. (p.5).
Chapter 2

PROBLEM EVIDENCE AND PROBABLE CAUSE

Problem Evidence

Although many of today's students are a joy to work with in the classroom, some are not. Some children are angry, alienated, and apathetic. A few are uncooperative, rude, abrasive, threatening and even violent. Some abuse drugs. Some are sexually promiscuous. Some belong to gangs. Why are some children such problems to themselves, to their parents, to their teachers, and to the community? This subject has been addressed by experts locally and nationally.

Survey Information

In order to document time-off-task, incomplete homework, and disruptive classroom behavior, a daily tally sheet was used to record the number of incidences over a three week period. (Appendix A) Anecdotal records were kept to differentiate types of disruptive behaviors and time-off-task incidences. Disruptive behavior is defined as any incident/infraction which interferes with direct instruction or study time. A major infraction is defined as physical fighting, interrupting the teacher, open defiance, or swearing. A minor disruption is defined as talking to peers, whistling, singing, or tapping pencils.
A summary of the number of incidents and categories is presented in Table 1.

Table 1

Behavior Observation Checklist
August 28, 1995 - September 15, 1995

<table>
<thead>
<tr>
<th>BEHAVIOR</th>
<th>WEEK 1</th>
<th>WEEK 2</th>
<th>WEEK 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td># OF</td>
<td># OF</td>
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<tr>
<td></td>
<td>INCIDENTS</td>
<td>STUDENTS</td>
<td>INCIDENTS</td>
</tr>
<tr>
<td>TIME OFF</td>
<td>46</td>
<td>18</td>
<td>39</td>
</tr>
<tr>
<td>TASKS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INCOMPLETE</td>
<td>32</td>
<td>22</td>
<td>36</td>
</tr>
<tr>
<td>ASSIGNMENTS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CLASSROOM</td>
<td>132</td>
<td>37</td>
<td>89</td>
</tr>
<tr>
<td>DISRUPTIONS</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Of the 557 incidents recorded during a 3 week period, 25 percent dealt with time off task, 17 percent with incomplete assignments and 58 percent with disruptive behavior. Seventy-four percent of the targeted students had at least one observed infraction. Further analysis indicates 41 out of 78 students had at least one incident of time-off-task in the 3 week period, 29 out of 78 students had
an incomplete assignment and 43 out of 78 students displayed some form of disruptive behavior (Table 2)

Figure 1
Students Involved In At Least One Incident
August 28, 1995 - September 15, 1995

Of the three classrooms, one class had three chronic offenders while the other two classrooms showed no such discrepancy.

During Week One of the record keeping, the researchers noted that half of the students were involved in classroom disruptions and in Week Two only one-fifth of the students were cited. However by Week Three, the number of classroom disruptions had increased and over a third of the students were once again involved. The number of incomplete assignments steadily decreased as the weeks progressed. Even though the number of classroom disruptions increased from Week Two to Week Three, in one classroom it was noted that the severity of the disruptions was not as intense.
An extraneous factor contributing to the high number of disruptions in the beginning of the school year could be attributed to the record breaking heat wave in Northern Illinois and the lack of air-conditioning in the classrooms. There was also major construction work ongoing throughout the site during the given period.

Perhaps another cause could be the necessary, but routine, procedures that all schools require in the beginning of the year, ie; classroom procedures, school discipline guidelines, teacher expectations, materials distributions, record keeping, etc.

Other circumstances that we must consider are the number of children from reconstituted families, students afflicted with ADD and ADHD who may or may not be receiving the appropriate medical attention, and students who receive Chapter 1/LD services, as well as those identified as gifted, who may have needs that are not being addressed.

Probable Cause of Problem

To comprehend the probable causes of disruptive classroom behavior, lack of assignment completion, and time-off-task, a variety of resources were consulted.

One cause may be inefficient classroom time management procedures. According to Berliner & Casanova (1993), students in a typical class attend to what they're supposed to about 70 percent of the time. For example, if a school subject is allocated fifty minutes, in a class where students attend about 70 percent of the time, only thirty-five minutes of instruction will be utilized by the students.

Another cause may be that students do not see the relationship between what they learn in school and their own lives. Burke (1992) states that although 50 percent of the students in an average classroom do value school and learning, the other 50 percent do not. The students that do not value school tend to
demonstrate more negative behaviors. As students progress toward ninth-grade, their interest and enthusiasm toward school becomes increasingly negative. The largest drop in interest and attitude comes between grades 5 & 7. (Berlinger & Casanova, 1993).

Still another cause may be the economy, which directly affects the school classroom climate. More two-parent working families exist; people are forced to work longer hours with fewer pay raises. Mortgages take up more of our income than they did twenty years ago. The level of inequality has risen; that is, the rich are getting richer and the poor, poorer. These statistics have real and sometimes disturbing consequences which affect students in the classrooms. This is the first generation in American history to have more downward social mobility than upward. Downward mobility is devastating in American society, not only because of the loss of economic resources, but also because self-worth is so closely connected to occupational status and income. Individual self-esteem and family honor are bruised by downward mobility. A change in family circumstances impairs the chances of the children- both as young people and later, as adults- to enjoy economic security and a comfortable lifestyle. The result of the poor getting poorer finds families experiencing marital problems, high levels of alcohol consumption and spouse and child abuse. Children, so dependent on peer approval, often find the increasing gap in material differences between themselves and their peers intolerable. This may explain why some try to become "somebody" by acting tough, joining a gang, rejecting authority, experimenting with drugs and sex, and running away from home. (Eitzen, 1992).

School climate may also be a contributing factor to disruptive behavior. As the size of a school increases, the climate becomes less positive. A larger building and more students create more challenges. According to Pierce (1994).
previous research has shown that student outcomes such as subject matter achievement and attitude toward a school subject might be improved by creating classroom environments that are more conducive to learning. These findings tend to agree with Goodlad's (1984) definition of classroom environment as the physical, emotional and aesthetic characteristics of the classroom that tend to enhance attitudes toward learning. Diminishing the possibility of failure in a classroom develops within the students a sense of safety and security. Many decisions about classroom organization have ramifications for students' beliefs about themselves and about the tasks they are asked to do.

Another probable cause may be parenting styles. According to Ginshurg and Bronstein's (1993) research, an authoritative parenting style more positively affects a child's intrinsic motivation than either the permissive or authoritarian parenting styles. In fact, children from authoritarian and permissive families tend to show less persistence and motivation toward their schoolwork. They tend also to be less socially responsible and independent. There is a positive correlation between children who show self-control in the classroom, and parents who emphasize their children's autonomy.

Another cause of incomplete homework and off-task behavior may be related to "work inhibition". This term refers to students who are capable of learning and have the necessary skills to do the classroom work, but they simply do not do the class assignments and do not stay on task. The work-inhibited student shares three personality characteristics, i.e.; this child will complete assignments if the teacher is right next to him/her, does not work independently, and is very self-conscious and thus shies away from expressing his/her feelings and opinions or taking a leadership role in the classroom. The work-inhibited student often is unknowingly passive-aggressive (Bruns, 1992).
Still another cause may be students who are not strong in the linguistic or mathematical intelligence; they become discouraged learners by fourth grade. Eighty percent of those who become discouraged, who fall behind, and who give up, are intellectually more comfortable in the areas Gardner has described as visual/spatial and bodily/kinesthetic. The same 80 percent struggle with linguistic and logical/mathematical intelligence. (Conrath, 1992).

A summary of probable causes for the problem gathered from the targeted school and the literature include the following elements: inefficient classroom time management procedures (Berliner & Casanova, 1993), students' attitude toward school (Burke, 1992 & Berliner & Casanova, 1993), economic stress on families (Eitzen, 1992), negative school climate (Pierce, 1994), deficient parenting styles (Ginsburg & Bronstein, 1993), work inhibitions (Bruns, 1992), and failure to address the students' multiple intelligences.
Chapter 3
THE SOLUTION STRATEGY

Review of the Literature

Analysis of problem evidence reveals that inappropriate behavior is a major concern of educators. Research suggests the following probable causes: inefficient use of classroom time management, students' attitude toward school, economic stress on families, parenting styles, work inhibitions, and not addressing the students' strengths as learners.

The literature search for solution strategies focuses on direct instruction with assignments designed to address the multiple intelligences, student choice being emphasized rather than teacher edicts, and cooperative learning used to actively engage all students in their own learning.

The literature regarding student choice and self-determination is compelling. According to Kohn, "much of what is disturbing about students' attitudes and behavior may be a function of the fact that they have little to say about what happens to them all day" (pg. 10). The benefits of having a sense of self-determination affects your general well-being. People rarely are ill, even though they deal with considerable stress, when they feel they have control over what happens to them. Few things lead more to depression and other forms of psychological distress than a feeling of helplessness. The way children learn how to make decisions is by making decisions, not by following directions. Deprive children of self-determination, and you have likely deprived them of
motivation. When given some choices for their learning, students would complete more learning tasks in less time, and if given the opportunity to participate in decisions about their schoolwork, would score higher on standardized tests.

Students always have a choice: We can't compel them to learn effectively or to care about what they are doing. Teaching requires the consent of students and discontent will not be chased away by the exercise of power (Kohn, 1993).

Four areas in which students can make academic decisions are: what to learn (choosing a text or where to start in the text), how to learn (alone, groups, sit or lie down), how well they learn (students can determine criteria to judge work; what a test should cover, and when it should be given), and why they learn (Kohn, 1993). In searching for solutions, teachers must remember that school is more than just intellectual development; it is about learning to become a responsible, caring person who can make good choices and solve problems effectively. When a problem develops, "bring the kid in on it". One person's freedom to choose is always compromised by a set of obligations to others (Kohn, 1993).

Active student involvement in learning tasks also addresses the issues of motivation and discipline. Berliner & Casanova (1994) suggest that students who are master-oriented, learning-oriented, or task-involved learn for the sake of it, not for the rewards they might accrue. Students who are intrinsically motivated to do well on school assignments and exert cognitive effort develop a deeper understanding of what they study.

One way of achieving this involvement could be through instructional projects. Projects have the capacity to motivate in three ways: each requires a question or problem which serves to organize the activities involved in the task, each of the
activities should be real-world quality, and the activities must result in some artifact (a presentation, a videotape, a musical score, poem and so forth).

Project based methods help students seek solutions to real problems, breaking down some of those barriers to the transfer of learning. Learning in projects is contextualized. Too much of school learning seems to be decontextualized, abstract, and unconnected to the daily existence of students. Students show little transfer of what they learn in school to what they do at home and in their neighborhoods. Projects of higher quality provide students with choices with what to work on and how to approach problems so they may be resolved. Such projects allow the teacher to promote cooperative learning and peer tutoring, both of which are desirable characteristics of the teaching/learning environment (Perrone, 1994).

Solutions such as using learning teams of two-to-five students gives each student a sense of belonging, freedom, power, and fosters in-depth knowledge. This type of classroom environment enables all children to actively participate. According to Glasser, students who view the classroom as a place which can satisfy their needs will be less disruptive. The teacher must move into the role of a facilitator and out of the role of lecturer (Glasser, 1985).

Engaging students in their own learning involves several common elements were noted. Students need to help define the content of the curriculum, be given time to wonder and find a particular direction that interests them, be given the opportunity to express their personal views, gain some "expertise" and have actual participation in the community (Perrone, 1994).

It is necessary to develop a curriculum that incorporates the school into the community and gets the community into the schools. It can make positive rites of passage that will draw students away from the hazardous rites of passage they now seek out. Teachers must provide students with a sense of belonging to
society. It is teachers who are in a position to erect these bridges to the community (Burke, 1991, pp. 11).

It is only by providing a positive, humane, and safe "gang" of youths who participate in the community and are recognized by the community that we will get them away from the other gangs that spread the fear we feel (Burke, 1991).

In an attempt to engage students in their own learning, several ways of achieving this choice have been suggested: outline goals, select content which has possibilities for engaging students, and help students make judgments about their own progress as learners (Perrone, 1994). Activities such as "paired quizzes" and collaborative projects violate the paradigm that sanctifies knowledge as something the teacher possesses at the beginning, which students acquire during the course, and then demonstrate as their own private possession on a test. To credit students' knowledge and their capacity to construct and critique knowledge is to empower students in a way that violates the unspoken norms of most classrooms (Wiske, 1994).

In classrooms where students are well-disciplined and motivated, the teacher must be a learner and openly negotiate knowledge with students. Teachers must be in authority without being authoritarian.

Lane (1990) contends that "effective discipline is an integral part of an effective school. Discipline is a skill to be taught rather than a punishment". In Dunbar Middle School in Fort Myers, Florida in 1986, the discipline plan was based on student choice and consequences and was adopted from Lee Canter's Assertive Discipline Models. Each student received a copy of the plan and parent signature was required. Consistency was the key. Classroom rules were always posted. The theory that young people can make appropriate choices when
expectations are clearly taught and consistently and fairly administered was proven by a dramatic decrease in behavior problems (Sweeney, 1992).

Current U.S. tests do not tap many of the skills and abilities that students need to develop in order to be successful in later life and in school. The contention is that today's education needs to prepare students to frame problems, find information, evaluate alternatives, create ideas and products, and invent new answers. Jobs require highly developed intellectual skills and technological training. Cooperative planning and problem solving are the "basic skills" that need to be taught (Darling-Hammond, 1993).

Teaching cooperative social skills to students will help them develop interpersonal skills, self-esteem, and an internal locus of control. Responsible and caring students are more cooperative than irresponsible, non-caring students. A teacher's goal should be to provide the framework of a caring, cooperative classroom so that students begin to handle their own individual discipline problems, problems within their groups, and class-wide problems. Problem-solving, decision-making, and conflict-resolution skills should be taught, modeled, monitored, and re-taught as needed throughout the school year if students are to accept responsibility for their own actions (Burke, 1992).

In learning to accept responsibility for their own actions, there is still a segment of the population, approximately 20 percent, who are capable, but who do not complete work on their own and do not stay on task. Brun (1992) worked with students who fit this typology, as well as their parents and teachers, and found that these students can improve work-inhibited behaviors. These are the students who need to feel liked by the teacher, who need large projects and assignments broken down into parts (as they become easily overwhelmed), and who benefit from being given leadership roles as well as daily opportunities to make decisions about what to study and what methods to use to complete a task.
Approximately 95 percent of the material we have to teach is prepackaged in a verbal/linguistic or logical/mathematical form (Lazear, 1992). If we can design and utilize Multiple Intelligence Theory to develop curriculum materials, more students will be reached more of the time.

Because schools focus on two intelligences-verbal/linguistic and logical/mathematical, MI theory could be used as a proactive approach to discipline and homework problems. To quote Armstrong (1994), "MI can greatly affect students' behavior in the classroom simply by creating an environment where individual needs are recognized and attended to through the school day." (pp. 105).

Teachers could communicate direction and class routines to students by using cues that will address other intelligences. For instance, turning off lights, (visual/spatial), playing a piano chord (musical/rhythmic), use of silence (intrapersonal), placing finger on your lips (bodily/kinesthetic), or counting 1-2-3- (logical/mathematical). In this way more students will internalize expected behaviors.

**Terminal Objective**

As the result of increased use of instruction based on the theory of Multiple Intelligences during the period of September 1995 to December 1995, the fifth and sixth grade students from the targeted classes will increase time-on-task, increase the number of completed assignments and decrease the number of classroom disruptions as measured by observation checklists, teacher anecdotal records, and teacher and student journal entries.

**Process Statements**

A. Collect data using teacher observation checklist observing classroom disruptions, time-off-task, and incomplete assignments.

B. Design a series of learning activities that address multiple intelligence theory.

C. Teach cooperative learning.
D. Assess time off task, classroom disruptions, and assignment completion through teacher observation, anecdotal records, and grade book.

**Action Plan**

A. Cover Letter to Parents (Appendix A)
   1. Multiple Intelligence Survey (MI pg. 34) (Appendix B)
   2. Explain Gardner and his theory on Multiple Intelligences (Chapman)
   3. Briefly explain each intelligence

B. Explain Multiple Intelligence Theory to Students
   1. Ask questions regarding interests (MI pgs. 38-40)
   2. On overhead - Pizza Wheel (MI pg. 39) Discuss
   3. Choose activities modeling the eight intelligences
      a. career day
      b. field trips
      c. biographies
      d. wall displays
      e. shelf displays
      f. board games
      g. plays, games and songs
   4. Assign the Human Intelligence Hunt (MI pg. 44)
   5. Design a bulletin board displaying a shoe each child has created fitting their predominant intelligence.

C. Students Fill Out:
   1. Pre and post multiple intelligence survey
   2. Multiple Intelligence charts
   3. Collect/tally - Compare to parents' survey

D. Using Teacher Observation Checklist, On-Going Data Collection Of:
   1. Time off task
   2. Incomplete assignments
   3. Disruptive behavior

E. Begin Teaching Cooperauve Learning Addressing Active Listening.
   1. Hook (BP pg. 80)
   2. Direct instruction using T chart
   3. Practice the skill
   4. Observe skill being used
   5. Metacognition Processing
F. As a Class, Students Brainstorm:
   1. The purpose of rules
   2. How rules apply to them
   3. End product results in a list of classroom rules

G. Another Social Skill is Taught - One Person Speaks at a Time
   1. Hook
   2. Direct instruction
   3. Practice the skill
   4. Observe skill being used
   5. Metacognition Processing

H. Students Design Products to Reinforce the Courtesies Needed for Cooperative Groups. These Designs will be Displayed with the Shoe Bulletin Board.

I. Other Social Skills are Taught - Moving In and Out of Groups, Control Volume of Talk, Stay with the Group, Keep Hands and Feet to Self, Practice All Roles.
   1. Hook
   2. Direct instruction
   3. Practice the skills
   4. Observe skill being used
   5. Metacognition Processing

J. Teach Roles used in Cooperative Learning:
   1. Recorder
   2. Problem-Solver
   3. Encourager
   4. Reader
   5. Checker
   6. Observer

K. Cooperative Group Selection
   1. Teacher selected cooperative groups.
   2. Students write detailed journal entries about their day-to-day experiences in each group. Examples from these entries will be used to compare productivity and emotions in each of these groups.

L. Cooperative Social Skills are Practiced. Group Bonding Activities are Introduced:
   1. Pick a group name
   2. Design a group motto, song, ad, flag, etc.
   3. Set group goals
M. Create Assignments for Each Chapter/Lesson/Unit Which Assess All Intelligences
   1. Student choice of assignment
   2. Difficulty level must be equal for all choices

N. Groups Develop a Project Utilizing All Multiple Intelligences

O. Student Assessment - At The End Of Twelve Weeks, Students are Assessed To See If Using Their Predominant Intelligences Made Any Differences In Assignment Completion, Time Off Task, and Classroom Disruptions.

Methods of Assessment

In order to assess the effects of intervention, teacher anecdotal records documenting students' behaviors/responses, observation checklists which document time-off-task, late homework, and disruptive behavior, pre and post surveys on students' attitude/aptitude toward school subjects, and teacher and student journals will be used as part of the assessment process.
Chapter 4

PROJECT RESULTS

Historical Description of Intervention

The objective of this project was to decrease disruptive behavior and time-off-task and to increase the number of completed assignments. The intervention invoked the implementation of curriculum based on Howard Gardner’s multiple intelligence theory and on cooperative learning.

A cover letter (Appendix B) and MI survey (Appendix C) was sent to the parents explaining multiple intelligence theory. They were asked to complete the attribute questionnaire based on how they perceived their child. The researchers then tallied and charted each student’s survey as shown in Appendix E. The students designed a shoe, which was displayed on a bulletin board, to depict their predominant way of learning. This bulletin board was used as a visual medium to instruct and remind students of the many different ways of learning.

Sample lessons, found in Appendix D, were devised to teach the students about each intelligence: verbal/linguistic, logical/mathematical, musical/rhythmic, visual/spatial, interpersonal, intrapersonal, bodily/kinesthetic and naturalist.

Observation check lists (Appendix A) and anecdotal records were kept throughout the intervention process.

Cooperative learning was a major component in the implementation of MI theory in the classroom. Groups were randomly selected the second week of September 1995. Methods of placing students in groups ranged from grouping according to last name, choosing a playing card to match playing cards other
students had chosen, to drawing a colored square of paper from a can to match the colored squares other students have drawn.

Specific social skills such as active listening, encouraging, consensus building, moving in and out of groups, and bonding activities were taught twice a week on a formal basis. Role playing and T charts were some methods used to teach these skills. During the twelve week intervention period, informal review of social skills and follow-up activities was addressed on the days when formal instruction on cooperative skills was not taught. Specific roles such as recorder, task-master, checker, materials gatherer, and speaker were explained, practiced, and observed during group sessions.

An important aspect of cooperative learning is processing social skills. At this time, students reflect on the social skills they have learned through wrap around, Mrs. Potter's questions, journaling, and PMI chart. Although processing was used each time a skill was taught or a group met, daily journals proved to be impractical due to time constraints.

Curriculum was designed to implement MI theory on a daily basis. Students were introduced to exercises intended to strengthen various intellectual capacities. On the average, 40 percent of the academic subjects were taught using MI theory. This 40 percent does not include any rote paper and pencil activities such as workbook pages and teacher published materials. Verbal/linguistic and logical/mathematical intelligences were addressed through other activities such as skits, plays, songs, and graphic organizers. Assignment options incorporating all intelligences were given to the targeted students approximately once a week. Students could choose any option to demonstrate their knowledge of subject material. Examples of such options are: rap, skit, summary, illustrations, create a game, prepare (20) questions, and pretend you are the character. Again, the number of assignments in which all or various
intelligences were used, and whether or not an assignment would be an individual or group assessment varied. The depth of the assignment often determined how many times options would or could be given to the targeted students. For instance, Researcher A realized that an accumulative activity, after a field trip, took students working in a group approximately 30 minutes on three different days to prepare for a presentation. Presentations took approximately two class periods. Because of the amount of time these assignments unexpectedly required, this was the only MI assessment option given during one five day period.

During the same week, however, Researcher B offered each student three different options per assignment while studying a novel. Because the nature of these assignments could be accomplished in a shorter amount of time and were done individually, this researcher was able to offer like assignments/options three separate times during one five day period.

Folders were used to chart and keep projects and assignments. Located on the cover of the folder was an assignment assessment chart. On this chart students indicated the intelligence(s) they used as assignments and projects were completed.

Presentation and Analysis of Results

The terminal objectives of the intervention addressed disruptive behavior, time-off-task, and the number of incompletely assignments. These behaviors were documented daily through the use of behavior checklists and anecdotal records.

The intervention process began in September 1995. In the analysis, behavior was compared for the first three weeks of September and the last three weeks of November.
Table 1
Behavior Observation Checklist
August 28, 1995 - September 15, 1995

<table>
<thead>
<tr>
<th>BEHAVIOR</th>
<th>WEEK 1</th>
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<tr>
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<td>39</td>
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<td>22</td>
<td>36</td>
<td>21</td>
<td>26</td>
<td>15</td>
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<tr>
<td>CLASSROOM DISRUPTIONS</td>
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<td>37</td>
<td>89</td>
<td>16</td>
<td>101</td>
<td>29</td>
</tr>
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</table>

Table 2
Behavior Observation Checklist
October 30, 1995 - November 17, 1995

<table>
<thead>
<tr>
<th>BEHAVIOR</th>
<th>WEEK 10</th>
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<th>WEEK 11</th>
<th></th>
<th>WEEK 12</th>
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<td>7</td>
<td>26</td>
<td>15</td>
<td>29</td>
<td>17</td>
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</table>

According to the data collected before and after the intervention, students made measurable growth. A total of 239 incidents were recorded the last three weeks of the intervention. Thirteen percent of the incidents dealt with time-off-
task, 54 percent with incomplete assignments, and 34 percent with disruptive behavior.

FIGURE 2

STUDENTS INVOLVED IN AT LEAST ONE INCIDENT
OCTOBER 30, 1995 - NOVEMBER 17, 1995

During the same time period, 78 percent of the targeted students had at least one observed infraction. Upon further analysis, ten out of 78 students had at least one incident of time-off-task. 40 students out of 78 had an incomplete assignment, and 21 out of 78 students were cited for displaying some form of disruptive behavior.
At the end of the intervention (Week 12), approximately 22 percent of the students were involved in classroom disruptions compared to 47 percent of the students during Week One. The data indicate, as the introduction of curriculum designed to implement learning through a variety of intelligences increased, the amount of disruptive behaviors declined. In addition, the decrease in disruptive behavior may have occurred because cooperative learning includes the teaching of social skills.

The data confirm that improvement was also noted in the number of students involved in off-task behavior. Eight percent of the students were cited in Week 12 compared to 23 percent of the students cited in Week One. Perhaps using MI theory and cooperative learning engaged the students more actively in their own learning thus increasing their time-on-task.
As shown in Figure 4, assignment completion did not improve during Week 12. 50 percent of the students had at least one late assignment as compared to 28 percent in Week One. The quantity and complexity of subject material increased over the duration of the intervention period. This may be a contributing factor in the number of students who had incomplete assignments. It should also be noted that Researcher A counted and recorded an assignment late each day the assignment was not turned in. One assignment may have been recorded as late as many as three or four times. This may explain why the number of late assignments is so high in Figure 3.

**FIGURE 4**

**COMPARISON OF NUMBER OF INCIDENTS BETWEEN WEEK 1 AND WEEK 12**

<table>
<thead>
<tr>
<th></th>
<th>WEEK 1</th>
<th>WEEK 12</th>
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<tbody>
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<td>CLASSROOM DISRUPTIONS</td>
<td><img src="image" alt="Graph" /></td>
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</table>
Upon further analysis, researchers found that students tended not to turn in objective written work such as spelling workbooks and math practice exercises. Assignments that addressed MI theory were more likely to be turned in on time. It is possible that the math and spelling are too decontextualized, abstract and unconnected to anything happening in the real world.

As previously stated in Chapter 2, conditions that may have contributed to inappropriate behavior in the beginning of the school year ie; heat wave, reconstruction, mundane beginning of the year procedures, students needing medication and special services, have been resolved. Extraneous conditions that may have contributed to this same behavior in November were time constraints and the anxiety of taking Iowa Tests of Basic Skills and the anticipation of Thanksgiving vacation.

Conclusions and Recommendations

Based on the presentation and analysis of the data regarding time-off task, incomplete assignments and disruptive behavior in the classroom, an improvement was shown in two out of three areas.

Upon reading the recommendations of previous teachers, the researchers realized that the potential for problem behavior could arise. In the beginning of the year, disruptive behavior was more apparent possibly due to the amount of time spent on direct instruction where any disruption was immediately noticeable.

Perhaps disruptive behaviors decreased because students gained more acceptance by their peers and confidence in their academic ability as they utilized the social skills taught through cooperative learning. With all members having a common goal and encouraging each other to accomplish the given task,
problems are minimal. Students stated that they got to know their classmates better, they had a sense of belonging, and that if they didn’t understand an assignment, they felt they weren’t alone and were free to ask others for help. Due to the nature of the intervention, researchers interacted with students in a freer, more casual manner, building a rapport between teacher and student that was not always possible using traditional methods of instruction. The power struggle that sometimes exists between teacher and student is no longer there.

Giving students the option to choose the approach to a problem or project validates their identity and provides a comfort level that encourages them to challenge their potential. Bodily/kinesthetic students had more opportunity to move and dramatize their knowledge. Musical/rhythmic students were validated for their way of knowing. Interpersonal students were given a space to talk out their answers. Students, engaged in their own learning, seem to have a desire to accomplish a task and not be disruptive.

As indicated by the data, the largest area of improvement was on-task behavior. Researchers attribute this improvement to the implementation of the intervention. Perhaps another reason time-off-task behavior decreased was the researchers used time tested teaching strategies such as; close proximity, taking objects away, and/or requesting, in a nonconfrontational manner, a student take out appropriate materials. It should also be noted that teacher/researchers’ perceptions of off-task behaviors changed. Doodling and staring were not always seen as off-task behaviors. In some cases, these behaviors actually seemed to help certain individuals concentrate on the material being presented.

The number of incomplete assignments was not significantly affected by this intervention. Upon further analysis of the data and anecdotal records, the researchers found that when students were given choices, assignment
completion was not a problem. When a choice was not given, students were more likely to avoid the assignment.

One unintended result of this intervention was the feeling of empowerment the teacher/researcher felt. Possible reasons for this empowerment include: the knowledge gained through research prior to implementing the intervention, a thorough and objective plan of documenting behaviors, and an intervention that included curricula which met the needs of many students.

It is the recommendation of the researchers that Armstrong's (1994) survey not be completed by the parents without the teacher/researcher first informing parents of MI theory. Some parents commented that the characteristics or attributes of certain intelligences listed were confusing.

Teaching MI theory to students is beneficial. Begin by making a goal of teaching one MI lesson per day. This creates a comfort level for teacher. By experiencing success in one area, the teacher will feel more confident to attempt pulling in more MI instruction.

Cooperative learning is one way to begin integrating MI into the curriculum as it focuses on the interpersonal and intrapersonal intelligences. As cooperative learning instruction continues, a place in the day automatically lends itself to other MI projects.

It should be noted that the researchers felt this type of curriculum, although enjoyable, is exhausting for both teacher and student. In addition, it tends to create a noisy classroom. For this reason, we purposely allotted part of each day to quieter activities. Several students also responded favorably to some quiet work time.

Teachers that want to implement this type of intervention should realize it is not a panacea. Rules and expectations need to be set high. Teachers need good classroom management skills in order to maintain classroom control.
In addition, time management skills are a necessity to complete an assessment of projects and other paperwork. The constant interaction between teacher and student allows little time to complete the other teacher responsibilities/duties that are required.

It is recommended that a different assessment tool be developed to evaluate this type of curriculum. All researchers were frustrated by district mandated dates for report cards and mid-term grades based on the traditional, graded reporting system. These report forms tended to limit the ability to report observations based on MI curriculum. Therefore, the researchers decided it was necessary to include additional paper and pencil exercises to meet the district's objective criterion. For example; there is no place to indicate strengths and weaknesses of students during group work. Nor is there an adequate space to provide the parents and students feedback regarding growth in the various intelligences. Lastly, there is no place to indicate growth in higher order thinking skills. We felt our district report cards gave only a bird's eye view of what the students worked on and developed in the classroom.

It is further recommended that the criteria, through the use of rubrics, be developed to assess a given assignment. The rubric should be a consensus between teacher and student. In this way the students know ahead of time what is expected and the level of achievement they wish to attain.

It was beneficial having a support group to discuss ideas and share in successes and failures. Each researcher brought with them their own experiences and ideas. Building camaraderie with each other was essential in doing this research. If our students could experience just a fraction of the bonding and cohesiveness that we did together, then cooperative learning and MI theory could become another approach to personal learning.
Based on the data presented, the researchers recommend the use of MI theory and cooperative learning as an effective means to improve behavior in the classroom.
References Cited


Appendix A

BEHAVIOR CHECKLIST

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## TOTAL CLASSROOM BEHAVIOR CHECKLIST

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<th>Wed.</th>
<th>Thurs.</th>
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</table>
August 25, 1995

Dear Parents,

We thought we'd start our letter with a quote by Howard Gardner because it summarizes our belief in the Multiple Intelligences Theory. According to Gardner, everyone possesses at least eight intelligences and each person's blend of competencies produces a unique cognitive profile. Our Masters Thesis focuses on the Multiple Intelligences and how they apply to your child's way of learning. The 8 Intelligences are: 1) Verbal/Linguistic = This is the capacity to use words effectively either orally or in writing. 2) Logical/Mathematical = The ability to use numbers effectively and to reason well. 3) Visual/Spatial = The ability to perceive the visual-spatial world accurately and to recreate one's visual experiences. 4) Bodily Kinesthetic = Expertise in using one's body to express ideas and feelings. 5) Musical/Rhythmic = the ability to use the core set of musical elements - pitch, rhythm, and tone, and the acute awareness of sound in one's environment. 6) Intrapersonal = The ability to know oneself and to then assume responsibility for one's life and learning. 7) Interpersonal = The ability to get along with, work with, and motivate others toward a common goal. 8) Naturalist = The ability to recognize plants and animals in your environment.

Our philosophy is "that every child can learn and it is our responsibility as educators to find each student's particular way of learning." We are asking you to help us by filling out the attached survey. Through these surveys we hope to develop instructional techniques to better meet your child's educational needs. Any insights/help you can give us will be greatly appreciated. Please return the
survey by Monday, August 28. Thank you! (We will send a follow up letter at a later date.)

Sincerely,

Mrs. Layng

Mrs. McGrane

Mrs. Wilson
Appendix C

Checklist for Assessing Students' Multiple Intelligences

Name of Student

Check items that apply:

**Verbal/Linguistic Intelligence**
- writes better than average for age
- spins tall tales or tells jokes and stories
- has a good memory for names, places, dates, or trivia
- enjoys word games
- enjoys reading books
- spells words accurately
- appreciates nonsense rhymes, puns, tongue twisters, etc.
- enjoys listening to the spoken word (stories, commentary on the radio)
- has a good vocabulary for age
- communicates to others in a highly verbal way

**Logical/Mathematical Intelligence**
- asks a lot of questions about how things work
- computes arithmetic problems in his/her head quickly
- enjoys math class
- finds math computer games interesting
- enjoys playing chess, checkers, or other strategy games
- enjoys working on logic puzzles or brainteasers
- enjoys putting things in categories or hierarchies
- likes to experiment in a way that shows higher order cognitive thinking
- thinks on a more abstract or conceptual level than peers
- has a good sense of cause-effect for age

**Visual/Spatial Intelligence**
- reports clear visual images
- reads maps, charts, and diagrams more easily than text
- daydreams more than peers
- enjoys art activities
- draws figures that are advanced for age
- likes to view movies, slides, or other visual presentations
- enjoys doing puzzles, mazes, or similar visual activities
- builds interesting three-dimensional constructions for age
- gets more out of pictures than words while reading
- doodles on workbooks, worksheets, or other materials

**Bodily/Kinesthetic Intelligence**
- excels in one or more sports
- moves, twitches, taps, or fidgets while seated for a long time in one spot

-excerpted from Multiple Intelligences in the classroom by Thomas Armstrong
cleverly mimics other people’s gestures or mannerisms
loves to take things apart and put them back together again
puts his/her hands all over something he/she’s just seen
enjoys running, jumping, wrestling, or similar activities
shows skill in a craft or has good fine-motor coordination in other ways
has a dramatic way of expressing herself/himself
reports different physical sensations while thinking or working
enjoys working with clay or other tactile experiences

Musical/Rhythmic Intelligence

tells you when music sounds off-key or disturbing in some other way
remembers melodies of songs
has a good singing voice
plays a musical instrument or sings in a choir or other group
Has a rhythmic way of speaking and/or moving
unconsciously hums to himself/herself
taps rhythmically on the table or desk as he/she works
sensitive to environmental noises
respond favorably when a piece of music is put on
sings songs that he/she has learned outside of the classroom

Interpersonal Intelligence

enjoys socializing with peers
seems to be a natural leader
gives advice to friends who have problems
seems to be street-smart
belongs to clubs, committees, or other organizations
enjoys informally teaching other kids
likes to play games with other kids
has two or more close friends
others seek out his/her company

Intrapersonal Intelligence

displays a sense of independence or a strong will
has a realistic sense of his/her strengths and weaknesses
does well when left alone to play or study
marches to the beat of a different drummer in his/her style of living and learning
has an interest or hobby that he/she doesn’t talk much about
has a good sense of self-direction
prefers working alone to working with others
accurately expresses how he/she is feeling
is able to learn from his/her failures and successes in life
has high self-esteem
The Giver
by Lois Lowry

If I were in charge of the world
I'd cancel

If I were in charge of the world
There would be

If I were in charge of the world
You wouldn't have

If I were in charge of the world
You wouldn't have

If I were in charge of the world
You wouldn't have

If I were in charge of the world
MUTIPLE INTELLIGENCE ACTIVITIES USING COOPERATIVE LEARNING

1. FORMATION OF GROUPS: Chosen according to birthdays

2. ROLE ASSIGNMENTS: Materials gatherer, recorder, speaker,

3. TASK: "Jigsawing" - Students were given a particular section of the U.S. government to teach. They could use any media necessary to explain their section. A presentation must be made.

4. TARGETED INTELLIGENCES: Verbal/Linguistic, Musical/Rhythmic, Interpersonal, Intrapersonal, Visual/Spatial, Bodily/Kinesthetic

5. SOCIAL SKILL: Moving in and out of groups

6. PROCESSING: Make a team cheer describing what each member contributed to the group.

7. ENCOURAGING ENERGIZER: "Thank ya, darling"

8. SUBJECT AREA: Social Studies
Appendix D

MULTIPLE INTELLIGENCE ACTIVITIES USING COOPERATIVE LEARNING

1. FORMATION OF GROUPS: None - Individual assignment

2. ROLE ASSIGNMENTS: None

3. TASK: Give (8) sentence/(8) illustration summary of novel

4. TARGETED INTELLIGENCES: Verbal/Linguistic, Visual/Spatial

5. SOCIAL SKILL: None

6. PROCESSING: PMI chart on activity

7. ENCOURAGING ENERGISER: Teacher feedback

8. SUBJECT AREA: Reading
Appendix D

MULTIPLE INTELLIGENCE ACTIVITIES USING COOPERATIVE LEARNING

1. FORMATION OF GROUPS: Based on experience in a canoe and swimming ability

2. ROLE ASSIGNMENTS: Rudder position, bow position and center

3. TASK: Canoe Kishwaukee River identifying historical landmarks, plant life, and animals indigenous to the area.

4. TARGETED INTELLIGENCES: Naturalist and Bodily/Kinesthetic

5. SOCIAL SKILL: Active Listening

6. PROCESSING: "Wrap Around"

7. ENCOURAGING ENERGIZER: High Five

8. SUBJECT AREA: Science
MULTIPLE INTELLIGENCE ACTIVITIES USING COOPERATIVE LEARNING

1. FORMATION OF GROUPS: Base groups

2. ROLE ASSIGNMENTS: Timekeeper, encourager, recorder, checker

3. TASK: Create an advertisement explaining the (5) Step Process used in solving a math problem. How can this (5) Step Process help you as a person?

4. TARGETED INTELLIGENCES: Interpersonal, Intrapersonal, Bodily/Kinesthetic, Musical/Rhythmic

5. SOCIAL SKILL: Agree/Disagree

6. PROCESSING: Mrs. Potter's Questions

7. ENCOURAGING ENERGIZER: "Awesome" Whole group

8. SUBJECT AREA: Math
MULTIPLE INTELLIGENCE ACTIVITIES USING COOPERATIVE LEARNING

1. FORMATION OF GROUPS: Randomly drawn using cards

2. ROLE ASSIGNMENTS: Timekeeper, leader, encourager, checker

3. TASK: Teach social studies vocabulary meanings to class by singing

4. TARGETED INTELLIGENCES: Musical/Rhythmic, Verbal/Linguistic

5. SOCIAL SKILL: Consensus

6. PROCESSING: Each person tells each member of the group one thing they did well.

7. ENCOURAGING ENERGIZER: Class clap

8. SUBJECT AREA: Social Studies
MULTIPLE INTELLIGENCE ACTIVITIES USING COOPERATIVE LEARNING

1. FORMATION OF GROUPS: Count off students 1 through 6. Students with same digit form a group.

2. ROLE ASSIGNMENTS: Timekeeper, checker, recorder, encourager

3. TASK: Create song, rap or skit showing the Order of Operations. Include two rules of order. Use math vocabulary such as number sentence and order of operations.

4. TARGETED INTELLIGENCES: Musical/Rhythmic, Logical/Mathematical, Interpersonal, Intrapersonal, Visual/Spatial

5. SOCIAL SKILL: Stay on Task/Stick with group

6. PROCESSING: Name one thing each person in your group did well.

7. ENCOURAGING ENERGIZER: Pat partners on the back

8. SUBJECT AREA: Math
MULTIPLE INTELLIGENCE ACTIVITIES USING COOPERATIVE LEARNING

1. FORMATION OF GROUPS: Whole group

2. ROLE ASSIGNMENTS: None

3. TASK: To predict what will happen after reading each paragraph of "The Captive". What is the story about? Who are they talking about?

4. TARGETED INTELLIGENCES: Verbal/Linguistic, Logical/Mathematical, Intrapersonal, Interpersonal

5. SOCIAL SKILL: Consensus

6. PROCESSING: Where and how could you use the teamwork skills you are developing in your daily lives?

7. ENCOURAGING ENERGISER: "Whoomp, there it is"

8. SUBJECT AREA: Reading
MULTIPLE INTELLIGENCE ACTIVITIES USING COOPERATIVE LEARNING

1. FORMATION OF GROUPS: No group - Individual

2. ROLE ASSIGNMENTS: None

3. TASK: Study Lakota Sioux. Create shield drawing four virtues that you felt are most important for an adult to possess. Field trip to view LaKota Sioux Dance Troop.

4. TARGETED INTELLIGENCES: Interpersonal, Bodily/Kinesthetic, Verbal/Linguistic, Visual/Spatial, Musical/Rhythmic,

5. SOCIAL SKILL: None

6. PROCESSING: Reflection paper - (I felt..., I wonder..., I wish...)

7. ENCOURAGING ENERGIZER: Feedback from teacher when shields and reflections are returned.

8. SUBJECT AREA: Social Studies
TEST OPTIONS

#1. Test (paper/pencil)

#2. Missing/lost poster

#3. 8 pictures/8 sentence summary

#4. Character/plot development chart
   
   intro - climax
   supporting conflict - summary
   incidental

#5. Compare/contrast
   (5 pairs) characters
   
   a. John McNob vs. Mars Bar
      Common Different
      1. 1.
      2. 2.

#6. Write a story describing Maniac's "Lost Year".

#7. Write a jump rope song of 5 stanzas telling more of the legend of Maniac.

#8. Small groups (3-4 people) act out a scene where Maniac meets one of the major characters (3-5 minutes).

#9. Design and write a Christmas card Maniac could have sent from his new home with Grayson. Include a message Maniac would have sent.


#11. Create a character web with 6 characters describing Maniac.

#12. Draw a 4-6 frame cartoon strip that shows Maniac's amazing feats.
HUMAN INTELLIGENCE HUNT

Find someone who can:

____ Whistle a few notes from the Star Spangled Banner.

____ Stand on one foot with her/his eyes closed for at least five seconds.

____ Recite at least four lines from any poem he has learned.

____ Draw a quick diagram explaining how an electric motor works.

____ Briefly share a dream she/he has had in the past two weeks.

____ Complete this numerical sequence: 36, 30, 24, 18, ____, and explain the logic behind it.

____ Honestly say she/he is relaxed and comfortable relating to other people during this exercise.

____ List four types of trees found in Illinois.

RULES:

- A person can perform only one task; therefore, to complete the hunt, a student must have eight different sets of initials.

- Students must actually perform the tasks listed, not simply say they can do them.
Appendix E

ASSIGNMENT ASSESSMENT CHART

NAME ______________________
GRADE ______________________

FIFTH-GRADE ACADEMY

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<th>PROJECT/ACTIVITIES</th>
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### Assignment Assessment Chart

**Name**

**Grade**

**Sixth-Grade Regular Ed**

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Appendix E

ASSIGNMENT ASSESSMENT CHART

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SIXTH-GRADE FINE ARTS

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