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ABSTRACT

This action research project evaluated a program to improve student motivation. The targeted population consisted of sixth- and eleventh-grade students in grammar/literature, physical education, and social studies classes in suburban Chicago. Three interventions were selected: incorporation of multiple intelligence strategies, implementation of cooperative learning, and use of authentic assessment. A post-intervention student survey and checklist indicated that student motivation was improved by the intervention. (Eleven appendices include parent letter, student surveys, and lesson materials. Contains 27 references.) (Author/EV)

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TEACHING STRATEGIES TO IMPROVE STUDENT MOTIVATION

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the School of Education in Partial Fulfillment of the
Requirements for the Degree of Master of Arts in Teaching and
Leadership

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ABSTRACT

This action research describes a program for the improvement of student motivation. The targeted population consists of sixth and eleventh grade students in grammar/literature, physical education, and social studies classes located in the western suburbs of Chicago. The quandary of how to motivate students has been documented through data indicating students not working at their ability level.

Upon the analysis of probable cause data, it was revealed that teachers are not adapting lessons to meet students' needs. Also peers'/parents' and students' attitudes can negatively affect students' performances.

A review of solution strategies and further analysis resulted in the selection of three interventions: incorporation of multiple intelligence strategies, implementation of cooperative learning and authentic assessment.

Post intervention data indicates that student motivation is improved with the implementation of the following teaching strategies: incorporation of multiple intelligence, cooperative learning, and authentic assessment.

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CHAPTER 1
 PROBLEM STATEMENT AND CONTEXT
 General Statement of the Problem

The students of the targeted sixth grade and eleventh grade level demonstrate a lack of motivation. This is observed in late or missing assignments, lack of necessary materials, low classroom participation, low test scores, and being tardy or absent to class.

Immediate Problem Context

This action research project is being conducted by three teachers/researchers. Study A is being conducted in a junior high school (Site A) at the sixth grade level by two teachers. Study B is being conducted at the high school (Site B) at the junior (eleventh grade) level.

Site A

Table 1

Racial/Ethnic Background and Total Enrollment

	<u>White</u>	<u>Black</u>	<u>Hispanic</u>	<u>Asian/ Pacific</u>	<u>Native American</u>	<u>Enrollment</u>
School	96.7%	0%	2.1%	1.2%	0%	335
District	98.1%	0.2%	0.9%	0.8%	0%	1186

Table 1 shows that the majority of the students at Site A are predominantly Caucasian, with very few minorities residing in the community.

Table 2

Low-income and Limited English Proficient Students

	<u>Low-income</u>	<u>Limited English Proficient</u>
School	0.3%	0.9%
District	0.1%	0.3%

Table 2 illustrates that there are very few students who are low-income and limited English proficient.

Table 3

Attendance, Mobility, and Chronic Truancy

	<u>Attendance</u>	<u>Mobility</u>	<u>Chronic Truancy</u>
School	96.8%	2.4%	0.0%
District	96.8%	3.3%	0.0%

Table 3 indicates that there is a high attendance rate, little mobility and no chronic truants at Site A.

The teaching staff employed by this district averages 14.3 years of experience. 46.9% of the teachers have a master's degree or a master's degree with advanced educational credit. This staff consists of 15% male and 85% female teachers. The staff is 100% white. According to the 1998 School Report Card, the average class size for site A was 24.4. The pupil-teacher ratio in this district was 18.3:1. The average teacher salary in this district was \$41,681 and the average administrator earned \$73,624.

The Surrounding Community

Site A is located in a village fifteen miles west of the city of Chicago. It is a community of approximately 12,000 people.

The community is composed mainly of white-collar professionals. The 1998 median family income was \$102,990, and the median home value was \$270,455.

One challenge that this district faces is the fact that with the exception of local businesses, this is a residential community with no industrial areas. Therefore, the district does not benefit from tax money that industry brings. There is also a lack of real estate for development. Primarily all the land has been used for single-family residences. Additionally, 80% of the residents do not have school-age children.

This district is composed of four schools: three elementary K-5 schools and one grade 6-8 junior high school, each with its own principal. The junior high school currently has an interim principal, and an assistant principal position has been newly assigned. The district has recently hired an assistant superintendent in charge of curriculum/staff development. According to the 1998 School Report Card, the student population for this district was 1186. Site A has a population of 335 students. The average class size for sixth grade in 1998 was 24.4, and the average for the district was also 24.4. In 1998, 94.7% of the students in this district took the Illinois Goal Assessment Program and 98.5% met or exceeded state goal expectations. This is also a district that values parental contact. There was personal contact between 99.5% of the students' parents/guardians and the school staff during the school year.

The school district has recently made some building improvements. In 1998 the junior high school building built an estimated two million dollar addition. The addition included a new library, two new computer labs and a new principal's office.

This project was completed to accommodate for the predicted growth in student population.

This district is also making strides to improve the use of technology. The local Education Foundation funded \$20,000 toward technology and the Board of Education funded \$80,000. The PTO also raised money for this project. This funding indicates both the district's and the community's commitment to technology.

Site B

Table 4

Racial/Ethnic Background and Total Enrollment

	<u>White</u>	<u>Black</u>	<u>Hispanic</u>	<u>Asian/ Pacific</u>	<u>Native American</u>	<u>Enrollment</u>
School	82%	5.4%	4.1%	8.5%	0%	483
District	83.1%	5.5%	4.4%	7.0%	0%	1645

Table 4 shows that the majority of the students at Site B are predominantly white, with approximately 15% minorities.

Table 5

Low-income, Limited English Proficient Students, and Dropouts

	<u>Low-income</u>	<u>Limited English Proficient</u>	<u>Dropouts</u>
School	11.8%	1.7%	1.7%
District	14.5%	3.4%	1.7%

Table 5 illustrates that approximately one of every ten students is from a low-income family and that there are very few students who are limited English proficient.

Table 6

Attendance, Mobility, and Chronic Truancy

	<u>Attendance</u>	<u>Mobility</u>	<u>Chronic Truancy</u>
School	94.6%	10%	0.0%
District	95.5%	10.2%	0.8%

The teaching staff of this school consists of twenty-two males and fourteen females, and the staff is 100% white. The average teaching experience of the district is 16.7 years. Also, 65.9% of the teachers have a master's degree or above.

Site B had an average class size of 20.5 students with a pupil-teacher ratio of 16:1. The composite score for the ACT test was 23.2 with 46.4% of the eligible students taking the test. The IGAP scores in all subject areas were above the state averages. The graduation rate for this school in 1998 was 90.3%.

The Surrounding Community

Site B is located in a village 20 miles west of Chicago. It is a middle-class suburb consisting of 22,085 residents. The median family income is \$52,176 and the median home value is \$169,521.

The K-12 unit school district includes three elementary schools (K-5), one middle school (6-8), and one high school (9-12). The district has a superintendent and an assistant superintendent. Each school has a principal with the middle school and high school having assistant principals.

The residents of Site B in the mid 1970's, built their own high school so that students would not be sent to neighboring communities. There are many partnerships among the businesses,

community organizations, and the school and its students.

This school district has been fully committed to implementing computer technology throughout its buildings during the past four years. Its objective has been to integrate technology with curriculum and to raise technology competencies of the staff. At Site B, all faculty and students have access to electronic mail and the Internet on a daily basis, as well as a variety of software application programs. Every teacher has a computer with multi-media capability and his/her desk. There are four computer labs in the building. Each computer is networked throughout the entire district, making communication more efficient.

National Context of the Problem

"How can I make my students interested in this lesson? How can I hold my students' attention? How can I help my students become more motivated?" Throughout the nation, teachers frequently reflect upon these questions. Major research findings support teachers' concerns about student inattention and poor effort. According to the National Center for Educational Statistics (Hootstein, 1994; Rothman 1990), a survey of 25,000 eighth grade students found that about half claimed they were bored in school half or most of the time. Other studies have found that increasing numbers of students merely sit in classrooms and cut themselves off from the flow of information (Hootstein, 1994; Clifford, 1990; Goodlad, 1984).

Consequently, many experts in the field have identified lack of students' motivation as one of the primary causes of low achievement levels (Hootstein, 1994; Tomlinson, 1991).

Experts argue about the value of extrinsic versus intrinsic

rewards. "Intrinsic motivation has been defined as (a) participation in an activity purely out of curiosity, that is, from a need to know more about something." (Deci, 1975 in Dev 1997, p. 13) "Extrinsic motivation is when a student has "an incentive to participate in or complete an activity" (Dev 1997 p. 13). "The most consistent effect found from the use of positive reward is that, after steady use of such rewards, their absence ultimately causes a decrease in the motivation of the students...so rewards don't necessarily create a long term predisposition to learn". (Swanson 1997 p.46)

Cameron and Pierce demonstrated in their 1994 meta-analysis of 96 experimental studies of learning motivation, properly administered extrinsic motivators do not extinguish intrinsic motivation; in fact, they actually enhance it. (Toward a Balanced Approach to Reading Motivation, 1997)

However, according to Alfie Kohn (1993), intrinsic motivation comes from within and is generally considered more durable and self-enhancing.

In conclusion, many educators feel that in order to improve student motivation, they must change their teaching strategies. "The solution to increased student motivation does not lie in reward programs. Rather, educators should use creative teaching techniques and a variety of classroom structures." (Horn, 1991, p.30)

CHAPTER 2
PROBLEM DOCUMENTATION
Problem Evidence

In order to document the lack of motivation among students, many instruments were used to provide the necessary data. A student questionnaire, a pre-survey on attitudes towards school, weekly checklists that tally the amount of occurrences of late or missing assignments, lack of necessary student materials, low student participation, low quiz/test scores, and tardiness or absence from school. The first two instruments were given at the beginning of the school year (August) to establish a baseline of the motivation level of the students. The weekly checklist will be an ongoing analysis of student behavior during the course of the research to establish an improvement or decline in the motivational level of the students.

The results of the data were collected by the members of the research team in their respective classes at the beginning of the school year. There were approximately forty-two students who completed the survey at the sixth grade level and sixteen students at the high school level.

Table #7 is the complete survey that was given at Site A and Site B.

Table #7

Attitudes Toward School Survey Results

- 1 = Disagree
 2 = Mildly Disagree
 3 = Undecided
 4 = Mildly Agree
 5 = Strongly Agree

	1	2	3	4	5
1. For the most part, school has been a pleasant experience.					
Pre-survey Site A:	0	1	10	26	4
Pre-survey Site B:	0	2	2	10	2
2. Most of my teachers seem to care about me as a person.					
Pre-survey Site A:	0	2	13	18	8
Pre-survey Site B:	0	3	3	6	4
3. My teachers demand too much work from me.					
Pre-survey Site A:	4	17	15	3	2
Pre-survey Site B:	1	5	4	5	1
4. Getting a good education is important to me.					
Pre-survey Site A:	0	0	0	5	36
Pre-survey Site B:	0	0	2	2	12
5. I work harder in school than do most students.					
Pre-survey Site A:	1	4	19	16	1
Pre-survey Site B:	3	2	7	2	2

- 1 = Disagree
 2 = Mildly Disagree
 3 = Undecided
 4 = Mildly Agree
 5 = Strongly Agree

	1	2	3	4	5
6. I do only enough work in school to get by.					
Pre-survey Site A:	16	10	9	5	1
Pre-survey Site B:	4	6	2	2	2
7. School has encouraged me to think for myself.					
Pre-survey Site A:	1	0	16	12	12
Pre-survey Site B:	1	0	6	7	2
8. I look forward to going to most of my classes.					
Pre-survey Site A:	1	2	10	17	11
Pre-survey Site B:	1	6	3	5	1
9. I should spend more time studying.					
Pre-survey Site A:	4	5	15	14	3
Pre-survey Site B:	1	3	2	8	2
10. If my teachers demanded more, I would probably work harder.					
Pre-survey Site A:	1	2	8	19	11
Pre-survey Site B:	2	4	4	5	1
11. I feel that I could discuss problems with most of my teachers.					
Pre-survey Site A:	2	6	7	18	8
Pre-survey Site B:	7	2	1	3	3

- 1 = Disagree
 2 = Mildly Disagree
 3 = Undecided
 4 = Mildly Agree
 5 = Strongly Agree

	1	2	3	4	5
12. I am comfortable asking questions in class.					
Pre-survey Site A:	1	2	5	17	16
Pre-survey Site B:	2	1	5	4	4
13. My teachers seem to enjoy teaching.					
Pre-survey Site A:	0	1	4	11	25
Pre-survey Site B:	0	2	1	6	7
14. School is boring.					
Pre-survey Site A:	13	8	15	4	1
Pre-survey Site B:	1	8	1	3	3
15. I am more concerned with getting good grades than with how much I learn.					
Pre-survey Site A:	7	12	13	4	5
Pre-survey Site B:	3	1	6	4	2
16. School is a very lonely experience.					
Pre-survey Site A:	29	7	2	3	0
Pre-survey Site B:	5	4	4	1	2
17. I try to please my teachers.					
Pre-survey Site A:	0	1	4	21	15
Pre-survey Site B:	1	2	3	7	3
18. As a rule, I am on time to class.					
Pre-survey Site A:	1	1	7	17	15
Pre-survey Site B:	1	1	2	4	8

- 1 = Disagree
 2 = Mildly Disagree
 3 = Undecided
 4 = Mildly Agree
 5 = Strongly Agree

	1	2	3	4	5
19. I do all of my assigned homework on a regular basis.					
Pre-survey Site A:	0	0	0	14	27
Pre-survey Site B:	2	1	0	2	11
20. If I am stuck on a question, it would be okay to copy an answer from another student or a text answer key.					
Pre-survey Site A:	34	3	4	0	0
Pre-survey Site B:	5	2	6	1	2
21. I am comfortable answering questions in class.					
Pre-survey Site A:	1	3	9	16	12
Pre-survey Site B:	3	1	2	5	5
22. I work cooperatively with others.					
Pre-survey Site A:	0	0	11	16	14
Pre-survey Site B:	1	0	3	7	5
23. In my opinion, I am a successful student.					
Pre-survey Site A:	0	0	5	16	20
Pre-survey Site B:	0	2	3	5	6

- 1 = Disagree
 2 = Mildly Disagree
 3 = Undecided
 4 = Mildly Agree
 5 = Strongly Agree

		1	2	3	4	5
24. My parents pressure me to achieve high grades.	Pre-survey Site A:	6	10	9	10	6
	Pre-survey Site B:	1	3	3	2	9
25. My teachers tell me when I am doing a good job.	Pre-survey Site A:	0	3	4	22	12
	Pre-survey Site B:	2	1	1	4	8
26. I bring required materials to class.	Pre-survey Site A:	0	1	8	17	15
	Pre-survey Site B:	0	1	1	2	12
27. I really try to get good grades.	Pre-survey Site A:	0	0	0	8	33
	Pre-survey Site B:	0	1	0	7	8
28. I ask questions and try to get help when I need it.	Pre-survey Site A:	0	1	6	18	16
	Pre-survey Site B:	2	1	3	6	4
29. I make up work when I have been absent.	Pre-survey Site A:	0	1	4	4	32
	Pre-survey Site B:	1	1	0	3	11

Part II: Multiple Choice

30. How would you characterize yourself with respect to homework completion?

Results:	Site A	Site B
	Pre	Pre
a. Last Minute Lizzie	5	2
b. Early Elly	17	2
c. Conscientious Connie	13	7
d. Minimum Matthew	3	2
e. Conniving Conor	2	1
f. Cheating Charlie	0	0
g. Speedy Gonzalez	3	3

31. What would your typical response be when you come to a particularly difficult problem or concept?

	Site A	Site B
	Pre	Pre
a. Skip it.	6	1
b. Develop a strategy (use an example, guess and check...).	34	12
c. Just tell me how to do it, don't tell me why.	3	3

32. I think I experience test anxiety because:

	Site A	Site B
	Pre	Pre
a. I don't feel prepared.	8	1
b. I don't feel confident.	0	3
c. I worry about grades.	18	6
d. I am not a good test taker. (Freeze up, brain lock)	5	4
e. I don't experience test anxiety.	12	4

33. Over the next four months (September-December), I am involved in extracurricular activities/work for ____ hours per week.

	Site A	Site B
	Pre	Pre
a. 0	1	2
b. 1-10	22	7
c. 11-20	16	3
d. 21 or more	4	2

34. On the average, I spend ____ hours per week on the computer, watching television, and/or playing video games.

	Site A	Site B
	Pre	Pre
a. 0-5	15	5
b. 6-15	21	4
c. 16-25	5	4
d. 26 or more	2	2

35. My parents take an active role in my education by:(use all that apply)

	Site A	Site B
	Pre	Pre
a. assisting with or checking homework.	34	6
b. using restrictions or grounding.	5	6
c. conferences with teachers.	6	2
d. hiring tutors.	0	1
e. other: _____	7	4
f. do not take an active role.	2	2

The data was collected as a means to establish a baseline of the student motivation level at site A and site B.

Probable Causes

There are multiple factors which contribute to the lack of student motivation. One reason students may not achieve at the level of their potential is because they see no connection between what they learn and their personal lives. In fact, Alfie Kohn (1993 p. 216) says; "Right now, a good deal of what students are required to do in school is, to be blunt, not worth doing." The tasks they are assigned involve very little creative thought and very much rote learning. These tasks have no apparent connection to children's lives and interests. In fact, there is no apparent parent connection between any two sentences on a worksheet, between any two tasks, between any two courses."

Monotony may also be a cause of low student achievement. "Doing the same thing over and over again without any appreciable change becomes dull, no matter how exciting it might seem in the

first place. Learning, with its demands for practice and routine, can become quickly tedious to many students." (Wlodkowski, Jaynes 1990 p.85) Teachers who fall into a rigid routine may lose student interest. Thus, learning is negatively affected.

Students who are not challenged may also not perform well. Students often perform at the level of the teacher's expectation. If the teacher does not expect the student to work at his/her ability, the student may lose interest. "Lack of challenge is another quality that eventually can make work or learning a humdrum affair. People feel stagnant when what they do demands too little of their ability and effort. However, it is in the area of challenging students that teachers walk a very tight line." (Wlodkowski, Jaynes 1990, p. 86)

Grades can negatively affect students' performance when they become the reason for learning. "Grades have become too big a carrot in too many schools and families. From a motivational standpoint are most helpful to the enjoyment of learning when they are seen as indicators of progress and quality learning. Grades are most oppressive when they are as the reason for learning." (Wlodkowski, Jaynes 1990, p. 41)

Lastly, students may demonstrate a lack of motivation when teachers fail to accommodate the various learning styles. According to Gauld, (1997) if we study the varied human learning styles based on the individuation theory of psychiatrist Carl Jung, we will realize that the learning styles of only 12.5 percent of us fit well in traditional classrooms. To succeed in schoolwork, we must really fit well in traditional classrooms. If the rest of us hope to succeed in schoolwork, we must scurry around adjusting our more innate approaches to thinking and learning. This may help explain why years of schooling play such

a limited role in how most of us actually conduct our lives.
Teachers need to differentiate their teaching methods to
accommodate students' individual needs.

CHAPTER 3
THE SOLUTION STRATEGY
Literature Review

There are many factors supported by educational literature that contribute to the lack of student motivation. Just as there is not one single cause for this problem, there is not just one solution. Interventions discussed in this chapter will include the use of authentic assessment, multiple intelligences, and cooperative learning.

Authentic assessment is one method that can be used to improve student motivation. According to Archbald and Newmann in (Burke,1999), students must be involved in the production, not just the reproduction, of knowledge in order to gain insight to the task. Authentic assessment offers students an alternative method to demonstrate their knowledge, not just their test-taking ability. Students with poor reading or writing skills are at a disadvantage when their grades are exclusively based on tests. When these students are given opportunities to be assessed using alternative methods, they tend to be much more successful. These assessments might include: projects, journals, group work, and portfolios. The teacher reflection below describes the motivational change that could result when alternative assessment is used.

"They will probably not take chemistry again unless required to

do so. They may have even left discouraged that they did not, or could not, do better on a very difficult multiple-choice final. I felt disheartened that, after working very hard all year, once again my students did not do better on their final. I never gave them an opportunity to show me what they had really learned. They left not realizing the depth or breadth of their knowledge. No wonder we become discouraged. . ."

(California Assessment Collaborative, 1993, pg. 104).

The teacher goes on to describe, by contrast, the last day of a different class called coordinated science, where students were required to complete performance tasks and portfolios rather than multiple-choice finals.

The coordinated science students spent their last day reviewing their own work and realizing how much they had learned during the year. They revisited their successes and what they had liked during the year. They evaluated these pieces and how they could improve on them next year. They evaluated their own behavior in groups and planned on improving their interpersonal skills for achieving more success next year. . . students left school with a sense of optimism and planning for next year. Their teacher did too! (California Assessment Collaborative, 1993, p.104)

Another reason that authentic assessments are necessary is in the era of technological advances. Students now need to know how to demonstrate their knowledge besides "pencil and paper" tests. According to S.P.Greenberg in (White, 1998), students need to be better prepared to handle new, unstructured situations and to search for information from multiple sources, rather than require more knowledge of certain, specific areas. In today's society, people need to know how to adapt to the constant changes we face.

Students need to bridge classroom learning and real world experiences. "The use of long-term projects can have a positive effects on students' motivation to learn, especially if these projects are organized around a driving question or problem. Examples of project-based learning programs have been produced on science topics by the Technical Education Research Center and the National Geographic Society. These projects focus on authentic problems(e.g. acid rain), involve students in data gathering and analysis, and require students active engagement over an extended period of time." (Blumenfeld, Soloway, Marx, Krajcik, Guzdial, & Palinscar, 1991 in SERVE, 1999, p.36)

Another method of authentic assessment is the use of portfolios in the classroom. Portfolios are a collection of student work, either teacher and/or student selected. "Portfolios and other assessment that involve teachers and students in some form of record keeping provide the structure for document student work and progress on an ongoing basis. Such methods also provide teachers and students some measure of control over assessment tasks." (Khattari, Kane and Reeve, 1995, p.80)

Lastly, authentic assessment is successful because it allows the teachers and the students to have a say in the grade. "By using the rubric to grade work, students understood expectation prior to the activity. By meeting with the teacher to determine a grade, students became more aware their development to determine future goals." (Dutt-Doner, Maddox, 1999. p.2) Involving the students in this process, it gives them a sense of ownership in their educational development and enables them to be a shareholder in determining their grades.

Another solution to improve student motivation is the use of multiple intelligences. "For most of us the word intelligence

brings up the kid in class who always knew the answers or got high scores on the college entrance exams. However, Gardner defines intelligence as the capacity to do something useful in the society in which you live. (Shelton 1999) The standard view of intelligence has been that intelligence is something you are born with and that you only have a certain amount of it. This view believes that a test can measure how smart a person is. However, Gardner challenges this view. His analysis suggests that rather than one or two intelligences, all humans have several intelligences. These human abilities Gardner identifies as:

- Linguistic intelligence: The capacity to use your language, your native language, and perhaps other languages, to express what's on your mind.
- Logical-mathematical intelligence: How people understand the underlying principles of some kind of a causal system or can manipulate numbers, quantities and operations.
- Spatial intelligence: The ability to represent the spatial world internally in your mind—the way a sailor or airplane pilot navigates the spatial world, or the way a chess player or sculptor represents a more circumscribed spatial world.
- Bodily-kinesthetic intelligence: The capacity to use your whole body or parts of your hand, your fingers, your arms—to solve a problem, make something, or put on some kind of production.
- Musical intelligence: The capacity to think in music, to be able to hear in patterns, recognize them, and perhaps manipulate them.
- Interpersonal intelligence: The understanding of other people.
- Intrapersonal intelligence: An understanding of yourself

- **Naturalist intelligence:** Designates the human ability to discriminate among living things (plants, animals) as well as sensitivity to other feature of the natural world (clouds, rock configurations). (Checkley 1997)

Advocates of multiple intelligences are not saying that children should not learn the literacies or disciplines. Rather, they argue that there is not one way to learn how to read or how to compute. In order to motivate all the students in the classroom, teachers need to use strategies that appeal to all types of learning styles. An inner city Seattle high school demonstrated how teachers can motivate students using multiple intelligences.

"The school piloted a schoolwide multiple intelligences week on international awareness. Teachers continued to teach within their own disciplines but all created lessons with an international focus. Literature faculty introduce short stories from the cultures of their students. Business education teachers focused on international trade issues, thereby complementing math instructors' lessons on foreign stock exchanges. Social studies teachers compared diverse forms of government and surveyed civil rights issues. Physical Education teachers taught games from around the world, while health teachers conducted a unit on infectious diseases. Art and music educators engaged students in a variety of visual and ethnomusicology. And in science classes, students studied local and global environmental issues." (Campbell, L. 1997, p. 3)

Teachers need to successfully incorporate all the multiple intelligences to motivate their students. According to Samples in (Shelton 1999), "If we watch children interact with their world, their entire experience is one of learning-through tasting, smelling, crawling, handling, talking and listening. As we grow

up...we are told to sit still, be quiet, stop daydreaming...and pay attention. For the child who learns best by moving around...and who needs to talk, we have taken away the ability to integrate information." Too often due to the pressures of standardized testing, teachers limit the curriculum to primarily focus on verbal-linguistic and mathematical skills. As a result, the majority of students are not given an opportunity to demonstrate their various intelligence strengths, and can become bored with the educational system. Teachers need to reach all students in order maintain a high level of motivation.

The use of technology within the classroom environment has also shown its merit for improving student motivation. According to William Fiske in (Archer 1998), an educational technology specialist at the Rhode Island department of education, he believes that children learn by doing, by presenting, by displaying by engaging. Learning happens best when the youngsters are doing the heavy lifting. Offering a variety of teaching strategies to the students engages the learner to fully develop their resources.

"Studies of the brain have shown that we need to move, sing, dance, draw, talk and reflect to learn effectively. So the first thing we need to let go of is the expectation that there is one 'right' way to learn or teach. Secondly, we need to let go of the expectation that our learners will be most successful if they use the same strategies that worked for us. Diversity is the key." (Shelton, 1999).

Lastly, another solution to improve student motivation is by incorporating cooperative learning. In the traditional classroom environment, direct instruction is one of the most common teaching methods. "Cooperative learning is the instructional use of small

groups so that students together to maximize their own and each other's learning" (Johnson, Johnson, & Holubec, 1993, p. 1) According to Bellanca and Fogarty (1991), students who increase their abilities to reason, solve problems and make decisions will look beyond the limits of any lesson. Cooperative learning gives students the opportunity to be more of an active participant in the learning process, therefore increasing their motivational level.

An advantage to using cooperative learning is that it allows students to benefit from the individual differences of others. According to Ames (1992,p.338), an important goal for teachers is "to establish an environment where individual differences are accepted and all students develop a feeling of 'I belong here'" . This objective is best achieved through a variety of grouping arrangements.

Another positive outcome of cooperative learning is the lowering of student anxiety. Students are less intimidated when addressing a teacher's question within a group rather than speaking individually in front of the class. The cooperative classroom is less intimidating for most students because discussions take place in pairs or small groups. Peers are less likely to place judgment on a team member as they are working together to accomplish a task. (Kagan, 1992). When the comfort level of a student is high, that student will be more motivated to participate in the learning process. In addition, when students feel like they belong or can identify within a cooperative group, the payoffs can be tremendous. According to Carl H. Rinne (1998), when a student is appointed the expert on a subject within a particular group, the other students will consult him and appeal to his sense of achievement. This identification can last years and can have a

major impact on a student's level of motivation.

Academically, all students benefit from a cooperative environment. Cooperative learning allows students to have greater opportunities to discuss, analyze and express opinions with their peers. This allows for a greater gain of knowledge because the student has a more active role than in the traditional classroom. "Evidence suggest that both low- and high-ability students benefit from cooperative learning group that provide a structure for peer tutoring. Higher achievers deepen their understanding of course material as they teach it to lower achievers, and lower achievers benefit from peer assistance" (Slavin, 1984).

Lastly, cooperative learning allows students to improve social skills. "Cooperative learning results in more positive social development and social relations among students at all grade levels" (Kagan, 1992, p.136). Students gain the skills necessary to plan, organize, and problem-solve with others. This not only builds peer relationships but gives students skills important in being a lifelong learner.

Project Objectives and Processes

This action research describes a program for the improvement of student motivation. The targeted population consists of sixth and eleventh grade students in grammar/literature, physical education, and social studies classes located in the western suburbs of Chicago. The quandary of how to motivate students has been documented through data indicating students not working at their ability levels.

Upon the analysis of probable cause data, it was revealed that

teachers are not adapting lessons to meet students' needs. Also peers/parents and students' attitudes can negatively affect students' performances.

A review of solution strategies and further analysis resulted in the selection of three interventions: authentic assessment, multiple intelligences and cooperative learning, as measured by student portfolios, teacher-made tests, projects, student surveys and reflections

Project Action Plan

The following outline describes the implementation of interventions taken for this action research. The schedule is approximately twelve weeks in length. The outline is organized week by week, taking into account holidays and institute days.

Week 1

- Distribute parent letter
- Administer Student Attitude Towards School Survey
- Administer Student Questionnaire

Week 2

- Administer multiple intelligences self profile and discuss results
- Discuss multiple intelligence learning styles
- Begin weekly checklist
- Explain the use of portfolios and complete the first entry

Week 3-10

- Include portfolio entries as applicable
- Implement authentic assessments
- Implement multiple intelligence activities

Week 11 & 12

- Administer student post survey
- Evaluate portfolios

- Closing reflective activity

Methods of Assessment

There are many different methods that can be used to assess student motivation. Examples of these would include different strategies to measure the value of authentic assessment, multiple intelligences, and cooperative learning.

The methods that will be used in this action research project will be based on information acquired as a result of the student surveys and questionnaires. Authentic assessment will be incorporated through the use of projects and portfolios. Lessons will also be designed to include various aspects of the multiple intelligences. These may incorporate the use of technology and varied activities. Lastly, cooperative learning techniques will be applied as an alternative teaching strategy to direct instruction.

In conclusion, the results of using authentic assessment, multiple intelligences, and cooperative learning will be monitored using a checklist and a post survey. It is the intent of this action plan that the use of these strategies can lead to a classroom environment that is conducive to improving teaching strategies student motivation.

CHAPTER 4

PROJECT RESULTS

Historical Description of the Intervention

The objective of this action research was to improve student motivation by using a variety of teaching techniques. The interventions used were authentic assessment, multiple intelligences, and cooperative learning. The project began by distributing a parent letter explaining the action research and the goals to improve student performance (Appendix A). Next, a survey was administered regarding students' attitudes towards school and learning (Appendix B).

Students also answered a questionnaire determining some personal preferences and explaining what type of activities they found motivating. (Appendix C). Overall results of the questionnaire showed little relevance to the study. However, two questions in particular revealed some interesting information. One question asked what type of classroom activities motivated students. Students responded overwhelmingly that they preferred group work, activities, and hands-on experiences. Students were also asked how other people influenced their motivation. Almost all students stated that internal desire motivated them more than parents, administrators, teachers, and friends.

In addition, during the second week, teachers began a weekly checklist that targeted specific student behaviors (Appendix D).

The checklist was used as an ongoing analysis of student behavior during the course of the research to establish an improvement or decline in the students' motivational level. The researchers felt that this tool may be better suited in a physical education environment than in the classroom. Also, at Site A, the numbers may have reflected the transition from a fifth grade self-contained classroom to a junior high setting. Once acclimated to the new environment, the overall amount of occurrences per category decreased at Site A.

One methodology used to improve student motivation was authentic assessment. During weeks three through ten, a variety of authentic assessments were implemented. Some of these included written tests, portfolios, journals, rubrics, projects, and graphic organizers. One example of authentic assessment used at Site A was the development of a newspaper which researched ancient Greece. Students were given topics to research on the Internet and then had to create articles and pictures based on their information. This project was graded using a rubric (Appendix E). At Site B, the students created a personal fitness plan which included a warm-up, cardio-respiratory, strength and a cool-down activity. The plan was created based on information gathered from fitness test results and analysis of health level. A rubric was used to assess each student's personal fitness plan (Appendix F).

Another intervention implemented was the use of multiple intelligences activities. At the beginning of the project, a multiple intelligences self-profile analysis was administered and discussed (Appendix G). Information was given regarding the different learning styles. Researchers used these results to develop lessons geared to meet their students' needs. One multiple

intelligence activity that was used at Site A was for students to create a scrapbook of their "perfect" kingdom. Students had to create a title page, dedication page, creed, journal entry and map of their kingdom for their scrapbooks. They next shared their scrapbooks with the class and then wrote a reflection about the project(Appendix H). At Site B, using the school grounds, students created an original fitness trail. They had to draw a map of their trail and include five timed fitness stops. Then all students performed all trails. Finally, students had to reflect on the effectiveness of their trail (Appendix I).

The third strategy used to improve student motivation was cooperative learning. Students who are more actively engaged in the learning process tend to be more motivated to learn. At Site A, the students were grouped together to create a study guide for an upcoming test. The unit was on the Fall of the Roman Empire. Each group was given a separate section to produce a review lesson. They were directed to generate fat and skinny questions that as a group they felt were important to the unit. These questions were then answered within the group, and then the groups presented a review lesson to the class (Appendix J). One cooperative learning activity students at Site B participated in was to create an original game. They had to include a description of the playing field, rules, equipment, and penalties. Next, they modeled the game to the class, and then the class played the new game (Appendix K).

Overall, the researchers followed the basic action plan. There were some fluctuations on weekly schedules to accommodate students' needs.

A pre-survey was also given to students at the beginning of this project. Pre-survey students were told to answer questions

based on overall educational experience. Post-survey students were directed to answer questions based on specific classes (6th grade grammar/literature, 6th grade social studies, and 11th grade physical education).

Presentation and Analysis of Data

Both the pre- and post-survey results are included in Table #8 so the reader can make direct comparisons of the data. Table #8 is the complete post-survey that was given at Site A and Site B.

Table #8

Attitudes Toward School Survey Results

- 1 = Disagree
- 2 = Mildly Disagree
- 3 = Undecided
- 4 = Mildly Agree
- 5 = Strongly Agree

	1	2	3	4	5
1. For the most part, school has been a pleasant experience.					
Pre-survey Site A:	0	1	10	26	4
Post-survey Site A:	0	1	3	15	22
Pre-survey Site B:	0	2	2	10	2
Post-survey Site B:	0	0	1	7	8

As shown in the data collected, the responses for this question indicate that the students moved from undecided or mildly agree, to strongly agree at both sites. This shows that there has been an increase in the amount of students who feel strongly that school has been a pleasant experience.

- 1 = Disagree
 2 = Mildly Disagree
 3 = Undecided
 4 = Mildly Agree
 5 = Strongly Agree

1 2 3 4 5

2. Most of my teachers seem to care
 about me as a person.

Pre-survey Site A:	0	2	13	18	8
Post-survey Site A:	1	0	8	11	21
Pre-survey Site B:	0	3	3	6	4
Post-survey Site B:	0	0	3	6	7

At Site A, the data in the pre-survey indicate a number of students who were undecided or mildly agreed that teachers seem to care about them as a person. The post-survey results indicate an increase from students who were undecided or mildly agreed to strongly agreed. At Site B, the change to be noted were the 3 students who mildly disagreed moved their responses to a more positive position.

3. My teachers demand too much work
 from me.

Pre-survey Site A:	4	17	15	3	2
Post-survey Site A:	21	14	4	1	1
Pre-survey Site B:	1	5	4	5	1
Post-survey Site B:	9	4	2	1	0

- 1 = Disagree
 2 = Mildly Disagree
 3 = Undecided
 4 = Mildly Agree
 5 = Strongly Agree

	1	2	3	4	5
4. Getting a good education is important to me.					
Pre-survey Site A:	0	0	0	5	36
Post-survey Site A:	1	0	1	5	34
Pre-survey Site B:	0	0	2	2	12
Post-survey Site B:	0	0	1	2	13
5. I work harder in school than do most students.					
Pre-survey Site A:	1	4	19	16	1
Post-survey Site A:	3	6	14	15	3
Pre-survey Site B:	3	2	7	2	2
Post-survey Site B:	1	2	3	8	2
6. I do only enough work in school to get by.					
Pre-survey Site A:	16	10	9	5	1
Post-survey Site A:	14	10	9	7	1
Pre-survey Site B:	4	6	2	2	2
Post-survey Site B:	7	2	5	1	1

- 1 = Disagree
 2 = Mildly Disagree
 3 = Undecided
 4 = Mildly Agree
 5 = Strongly Agree

	1	2	3	4	5
7. School has encouraged me to think for myself.					
Pre-survey Site A:	1	0	16	12	12
Post-survey Site A:	0	2	13	13	13
Pre-survey Site B:	1	0	6	7	2
Post-survey Site B:	1	2	7	5	1

8. I look forward to going to most of
my classes.

Pre-survey Site A:	1	2	10	17	11
Post-survey Site A:	0	2	9	11	19
Pre-survey Site B:	1	6	3	5	1
Post-survey Site B:	1	0	2	3	10

The numbers have increased at both site A and site B for students who strongly agree that they look forward to these classes.

9. I should spend more time studying.

Pre-survey Site A:	4	5	15	14	3
Post-survey Site A:	6	6	9	13	7
Pre-survey Site B:	1	3	2	8	2
Post-survey Site B:	1	1	2	8	4

- 1 = Disagree
 2 = Mildly Disagree
 3 = Undecided
 4 = Mildly Agree
 5 = Strongly Agree

	1	2	3	4	5
10. If my teachers demanded more, I would probably work harder.					
Pre-survey Site A:	1	2	8	19	11
Post-survey Site A:	3	4	9	13	12
Pre-survey Site B:	2	4	4	5	1
Post-survey Site B:	3	3	2	5	3

11. I feel that I could discuss problems with most of my teachers.					
Pre-survey Site A:	2	6	7	18	8
Post-survey Site A:	4	4	9	12	12
Pre-survey Site B:	7	2	1	3	3
Post-survey Site B:	1	2	5	5	3

12. I am comfortable asking questions in class.					
Pre-survey Site A:	1	2	5	17	16
Post-survey Site A:	2	1	1	15	22
Pre-survey Site B:	2	1	5	4	4
Post-survey Site B:	0	0	0	4	12

At both sites, numbers indicated that students felt more comfortable asking questions in class. The change was more significant at site B.

- 1 = Disagree
 2 = Mildly Disagree
 3 = Undecided
 4 = Mildly Agree
 5 = Strongly Agree

	1	2	3	4	5
13. My teachers seem to enjoy teaching.					
Pre-survey Site A:	0	1	4	11	25
Post-survey Site A:	1	1	3	3	33
Pre-survey Site B:	0	2	1	6	7
Post-survey Site B:	0	0	3	5	8

14. School is boring.					
Pre-survey Site A:	13	8	15	4	1
Post-survey Site A:	29	7	2	2	1
Pre-survey Site B:	1	8	1	3	3
Post-survey Site B:	13	0	1	1	1

There was a large jump from students at both sites who felt undecided about school being boring to strongly disagreeing with this comment.

15. I am more concerned with getting good grades than with how much I learn.					
Pre-survey Site A:	7	12	13	4	5
Post-survey Site A:	9	13	13	4	2
Pre-survey Site B:	3	1	6	4	2
Post-survey Site B:	1	0	5	4	6

- 1 = Disagree
 2 = Mildly Disagree
 3 = Undecided
 4 = Mildly Agree
 5 = Strongly Agree

	1	2	3	4	5
16. School is a very lonely experience.					
Pre-survey Site A:	29	7	2	3	0
Post-survey Site A:	29	5	6	1	0
Pre-survey Site B:	5	4	4	1	2
Post-survey Site B:	9	3	1	3	1
17. I try to please my teachers.					
Pre-survey Site A:	0	1	4	21	15
Post-survey Site A:	0	0	5	16	20
Pre-survey Site B:	1	2	3	7	3
Post-survey Site B:	1	1	2	7	5
18. As a rule, I am on time to class.					
Pre-survey Site A:	1	1	7	17	15
Post-survey Site A:	1	0	0	10	30
Pre-survey Site B:	1	1	2	4	8
Post-survey Site B:	1	3	1	4	7
19. I do all of my assigned homework on a regular basis.					
Pre-survey Site A:	0	0	0	14	27
Post-survey Site A:	0	0	0	9	32
Pre-survey Site B:	2	1	0	2	11
Post-survey Site B:	2	2	3	4	5

- 1 = Disagree
 2 = Mildly Disagree
 3 = Undecided
 4 = Mildly Agree
 5 = Strongly Agree

1 2 3 4 5

20. If I am stuck on a question, it would be okay to copy an answer from another student or a text answer key.

Pre-survey Site A:	34	3	4	0	0
Post-survey Site A:	31	6	3	1	0
Pre-survey Site B:	5	2	6	1	2
Post-survey Site B:	4	3	3	3	3

21. I am comfortable answering questions in class.

Pre-survey Site A:	1	3	9	16	12
Post-survey Site A:	2	1	1	11	26
Pre-survey Site B:	3	1	2	5	5
Post-survey Site B:	0	0	1	3	12

At both sites, there was a large increase in the amount of students who mildly disagreed about answering questions in class to strongly disagreeing.

- 1 = Disagree
 2 = Mildly Disagree
 3 = Undecided
 4 = Mildly Agree
 5 = Strongly Agree

	1	2	3	4	5
22. I work cooperatively with others.					
Pre-survey Site A:	0	0	11	16	14
Post-survey Site A:	2	1	5	13	20
Pre-survey Site B:	1	0	3	7	5
Post-survey Site B:	0	0	1	4	11

At Site A, there was a large increase in the amount of students who were undecided to students who strongly agreed that they work cooperatively with others. At Site B, many students moved from the mildly agreed category to strongly agreed.

23. In my opinion, I am a successful student.

Pre-survey Site A:	0	0	5	16	20
Post-survey Site A:	1	0	4	18	18
Pre-survey Site B:	0	2	3	5	6
Post-survey Site B:	0	0	4	5	7

24. My parents pressure me to achieve high grades.

Pre-survey Site A:	6	10	9	10	6
Post-survey Site A:	7	9	9	6	15
Pre-survey Site B:	1	3	3	2	9
Post-survey Site B:	2	1	2	2	9

- 1 = Disagree
 2 = Mildly Disagree
 3 = Undecided
 4 = Mildly Agree
 5 = Strongly Agree

	1	2	3	4	5
25. My teachers tell me when I am doing a good job.					
Pre-survey Site A:	0	3	4	22	12
Post-survey Site A:	1	3	7	11	19
Pre-survey Site B:	2	1	1	4	8
Post-survey Site B:	0	0	2	6	8
26. I bring required materials to class.					
Pre-survey Site A:	0	1	8	17	15
Post-survey Site A:	0	0	0	14	27
Pre-survey Site B:	0	1	1	2	12
Post-survey Site B:	0	1	2	4	9
27. I really try to get good grades.					
Pre-survey Site A:	0	0	0	8	33
Post-survey Site A:	0	0	4	5	32
Pre-survey Site B:	0	1	0	7	8
Post-survey Site B:	0	0	2	6	8
28. I ask questions and try to get help when I need it.					
Pre-survey Site A:	0	1	6	18	16
Post-survey Site A:	1	4	5	14	18
Pre-survey Site B:	2	1	3	6	4
Post-survey Site B:	1	1	3	4	7

- 1 = Disagree
 2 = Mildly Disagree
 3 = Undecided
 4 = Mildly Agree
 5 = Strongly Agree

	1	2	3	4	5
29. I make up work when I have been absent.					
Pre-survey Site A:	0	1	4	4	32
Post-survey Site A:	1	3	3	2	32
Pre-survey Site B:	1	1	0	3	11
Post-survey Site B:	1	2	2	7	4

Part II: Multiple Choice

Due to the nature of the multiple choice questions, students were directed that they may select more than one answer. In addition, the results are shown next to another so the reader can make a direct comparison with the data.

30. How would you characterize yourself with respect to homework completion?

Results:	Site A		Site B	
	Pre	Post	Pre	Post
a. Last Minute Lizzie	5	4	2	8
b. Early Elly	17	16	2	2
c. Conscientious Connie	13	15	7	2
d. Minimum Matthew	3	2	2	2
e. Conniving Conor	2	1	1	0
f. Cheating Charlie	0	0	0	0
g. Speedy Gonzalez	3	2	3	2

31. What would your typical response be when you come to a particularly difficult problem or concept?

Results:	Site A		Site B	
	Pre	Post	Pre	Post
a. Skip it.	6	2	1	0
b. Develop a strategy (use an example, guess and check).	34	38	12	11
c. Just tell me how to do it, don't tell me why.	3	1	3	5

32. I think I experience test anxiety because:

Results:	Site A		Site B	
	Pre	Post	Pre	Post
a. I don't feel prepared.	8	4	1	1
b. I don't feel confident.	0	2	3	1
c. I worry about grades.	18	21	6	4
d. I am not a good test taker. (Freeze up, brain lock)	5	4	4	2
e. I don't experience test anxiety.	12	10	4	10

33. Over the next four months (September-December), I am involved in extracurricular activities/work for ____ hours per week.

Results:	Site A		Site B	
	Pre	Post	Pre	Post
a. 0	1	2	2	1
b. 1-10	22	25	7	5
c. 11-20	16	11	3	5
d. 21 or more	4	3	2	0

34. On the average, I spend ____ hours per week on the computer, watching television, and/or playing video games.

Results:	Site A		Site B	
	Pre	Post	Pre	Post
a.0-5	15	17	5	3
b.6-15	21	18	4	8
c.16-25	5	4	4	0
d.26 or more	2	2	2	2

35. My parents take an active role in my education by:(use all that apply)

Results:	Site A		Site B	
	Pre	Post	Pre	Post
a.assisting with or checking homework.	34	37	6	6
b.using restrictions or grounding.	5	3	6	7
c.conferences with teachers.	6	12	2	5
d.hiring tutors.	0	3	1	1
e.other: _____	7	5	4	2
f.do not take an active role.	2	2	2	4

The results did not indicate a significant change from the pre survey to the post survey responses in the multiple choice section.

Conclusions and Recommendations

The overall goal of this action research was to improve student motivation by incorporating a variety of teaching techniques. The instructional methods incorporated were authentic

assessment, multiple intelligences, and cooperative learning. The researchers did find that the use of these techniques were beneficial to student motivation. According to the results of the survey, more students looked forward to the classes studied and felt comfortable asking and answering questions. More students also felt they worked cooperatively with others, and that teachers were caring. Creating a positive climate can only help improve a student's desire to do well. In addition, a student's comfort level in a class can often determine that student's motivation and success. Also more students indicated that school was a pleasant experience in the post survey, and less students thought school was boring. As stated previously students who are not challenged often lose the desire to do well. "Lack of challenge is another quality that eventually can make work or learning a humdrum affair"(Wlodkowski, Jaynes, p. 41). Researchers felt the interventions not only helped make lessons more interesting but also more challenging. In conclusion, researchers felt that by incorporating a variety of teaching strategies, particularly authentic assessment, multiple intelligences, and cooperative learning, students will benefit.

After examining the results, researchers also considered ways this project could improve. One area of concern was the survey. In an effort to be thorough, the researchers asked thirty-five questions. In retrospect this was way too many! It not only made it a lengthy task for students to answer, but also for researchers to evaluate. Narrowing the survey to ten - fifteen questions would effectively accomplish the goal of the survey. The checklist was also somewhat lengthy. Shortening it may have also made it a more effective tool. Lastly, at Site A there was a concern that in addition to the interventions taken, the

transition from elementary school to junior high may have also influenced the results of the study. It would be recommended to follow these students for another year using the same kind of interventions. This would give a more accurate picture of the long term effects on these students.

At the closure of this project researchers not only discussed the conclusions of their findings, but also recommendations for teachers when using these strategies. First, it is important for educators to understand that the interventions used may take more instructional time than a more traditional lesson. It requires the teacher to be flexible with class time and class structure. They may also take more time to plan. However, the time is well spent. Also researchers suggest implementing the different techniques one at a time. Balance is the key. An instructor should not try to do everything at once, because overkill will accomplish nothing. Once these strategies have been introduced and implemented, varying their use would be most effective. These strategies are not meant to completely replace traditional learning, but to add a variety to better meet all students' needs. Lastly, it is crucial that *both* the instructor and the students feel comfortable with the strategy being used. It is critical that the teacher receives the additional support and materials that may be needed for success.

In conclusion, the results of this study indicate the implementation of authentic assessment, multiple intelligences, and cooperative learning can positively influence a student's motivation. Both teachers and students need the appropriate support for this to be accomplished. This success may not only encourage students to do well in school, but more importantly to become lifelong learners.

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APPENDICES

Appendix A
Parent Letters
Site A

Saint Xavier University
Consent to Participate in a Research Study
"Improving Student Motivation"

Dear Parents:

We are currently enrolled in a master's program through Saint Xavier University. As part of the graduation requirements, we are involved in an action research project. Our topic is improving student motivation. During this first semester, we will be implementing a variety of teaching strategies and activities that will benefit your child's classroom experience. Any information used will be strictly confidential, and participation will be in keeping with normal school procedures.

We are looking forward to working with your child. If you have any questions, feel free to contact us at Site A. Thank you for your support.

Signature of Parent/Guardian

Date

Signature of Student

Sincerely,
Mr. Kariotakis
Mrs. Moutvic

Appendix A (continued)
Parent Letters
Site B
Saint Xavier University
Consent to Participate in a Research Study
"Improving Student Motivation"

Dear Parents:

I am currently enrolled in a master's program through Saint Xavier University. As part of the graduation requirements, I am involved with a group in an action research project. Our topic is improving student motivation. During this first semester, I will be implementing a variety of teaching strategies and activities that will benefit your child's classroom experience. Any information used will be strictly confidential, and participation will be in keeping with normal school procedures.

If you have any questions, or if you wish for your child to not participate in any activities involved in this research project, feel free to contact me at Site B. I am looking forward to working with your child. Thank you for your support.

Sincerely,

Mrs. Roberts

Appendix B
 Attitudes Toward School Post Survey
Attitudes Toward School Post Survey

Part I: Survey

Directions: On a 5-point scale, indicate the degree to which you agree or disagree with each of the following statements.

1 = Disagree

2 = Mildly Disagree

3 = Undecided

4 = Mildly Agree

5 = Strongly Agree

- ___ 1. For the most part, this class has been a pleasant experience.
- ___ 2. My teacher seems to care about me as a person.
- ___ 3. My teacher demands too much work from me.
- ___ 4. Getting a good education is important to me.
- ___ 5. I work harder in this class than do most students.
- ___ 6. I do only enough work this class to get by.
- ___ 7. This class has encouraged me to think for myself.
- ___ 8. I look forward to coming to this class.
- ___ 9. I should spend more time studying.
- ___ 10. If my teacher demanded more, I would probably work harder.
- ___ 11. I feel that I could discuss problems with my teacher.
- ___ 12. I am comfortable asking questions in this class.
- ___ 13. My teachers seem to enjoy teaching.
- ___ 14. This class is boring.
- ___ 15. I am more concerned with getting good grades than with how much I learn.

Appendix B (continued)

Attitudes Toward School Post Survey

- ___ 16. This class is a very lonely experience.
- ___ 17. I try to please my teacher.
- ___ 18. As a rule, I am on time to this class.
- ___ 19. I do all of my assigned homework for this class on a regular basis.
- ___ 20. If I am stuck on a question, it would be okay to copy an answer from another student or a text answer key.
- ___ 21. I am comfortable answering questions in this class.
- ___ 22. I work cooperatively with others in this class.
- ___ 23. In my opinion, I am a successful student in this class.
- ___ 24. My parents pressure me to achieve high grades.
- ___ 25. My teacher tells me when I am doing a good job in this class.
- ___ 26. I bring required materials to this class.
- ___ 27. I really try to get good grades in this class.
- ___ 28. In this class, I ask questions and try to get help when I need it.
- ___ 29. I make up work when I have been absent from this class.

Part II: Multiple Choice

- ___ 30. How would you characterize yourself with respect to homework completion in this class?
- | | |
|-------------------------|---------------------|
| a. Last Minute Lizzie | e. Conniving Conor |
| b. Early Elly | f. Cheating Charlie |
| c. Conscientious Connie | g. Speedy Gonzalez |
| d. Minimum Matthew | |

Appendix B (continued)

Attitudes Toward School Post Survey

- ___ 31. In this class, what would your typical response be when you come to a particularly difficult problem or concept?
- a. Skip it.
 - b. Develop a strategy (use an example, guess and check...).
 - c. Just tell me how to do it, don't tell me why.
- ___ 32. I think I experience test anxiety in this class because:
- a. I don't feel prepared.
 - b. I don't feel confident.
 - c. I worry about grades.
 - d. I am not a good test taker. (Freeze up, brain lock)
 - e. I don't experience test anxiety.
- ___ 33. Over the next four months (September-December), I am involved in extracurricular activities/work for ___ hours per week.
- a. 0
 - b. 1-10
 - c. 11-20
 - d. 21 or more
- ___ 34. On the average, I spend ___ hours per week on the computer, watching television, and/or playing video games.
- a. 0-5
 - b. 6-15
 - c. 16-25
 - d. 26 or more

Appendix B (continued)

Attitudes Toward School Post Survey

- _____ 35. My parents take an active role in my education by:(use all that apply)
- a. assisting with or checking homework.
 - b. using restrictions or grounding.
 - c. conferences with teachers.
 - d. hiring tutors.
 - e. other: _____
 - f. do not take an active role.

Appendix C
Student Questionnaire

Name: _____

Date: _____

Student Questionnaire

1. The subject you are most successful in is

 2. The subject you find the most challenging is

 3. What do you like to do in your spare time?

 4. How often do you read for fun?

 5. The class I enjoy the most is _____ because

 6. What kind of classroom activities motivate me?

 7. What goals will you set for yourself this quarter?

 8. How do you plan to accomplish these goals?

9. How much influence do the following people have on your motivation to learn?
Please use the following scale.
- | | not
influential | slightly
influential | pretty
influential | very
influential |
|---------------------------|--------------------|-------------------------|-----------------------|---------------------|
| A. Parent/Guardian | 1 | 2 | 3 | 4 |
| B. School Administrator | 1 | 2 | 3 | 4 |
| C. Teacher | 1 | 2 | 3 | 4 |
| D. Self (Internal desire) | 1 | 2 | 3 | 4 |
| E. Other: _____ | 1 | 2 | 3 | 4 |

Appendix E
Authentic Assessment Lesson

Site A

Greek Newspaper

Congratulations on your promotion from delivering the newspaper to writing for the newspaper. You are responsible for writing an article on Ancient Greece for a class newsletter. Your article will be at least one paragraph in length and must contain a graphic of some sort. This will be explained the section below. There are a variety of topics to write about. In order to make it easier for the class you will be asked to pick your top three choices and I will try to accommodate that as best as I can. Here are your topics:

Front Page

Battle of Salamis

Peloponnesian War

A soldier's life

Aristotle

Socrates

Pythagoras

Odysseus

Democratic Ideas

Gods

Alexander the Great

Battle of Thermopylae

Battle of Marathon

The Acropolis

Plato

King Minos

Hellenistic Age

Agamemnon

Greek Discoveries

Goddesses

Greco-Persian War

Weapons

Pericles

Weather

Hippocrates

The Trojan War

Achilles

Mathematics

Women in the news

Tempo/Travel/Sports

Horoscopes

Theater reviews

The Odyssey

Tourist attractions

Fashion

Hercules

Weekend Plus

Advice Column

Oracles

Aesop's Fables

The Iliad

Schools

Olympic Games

Perseus

Art

Life in Athens

Business

Trade

Advertising

Help Wanted

Comics

Philosophers

Book Reviews

Food reviews

Furniture

Theseus

Greek Architecture

Greek Myths

Life in Sparta

Stock Market

Appendix E (continued)
Authentic Assessment Lesson
Site A

Grading Scale:

Your grade will be determined using a rubric on the following items:

1. typed paragraph (15 points)
2. graphic (15 points)
3. use of class time. (10 points)

Other thoughts

We will begin this project on Wednesday, February 9. The paragraph and graphic will be due Friday, February 11. Be creative, use your imagination! Be sure to make excellent use of your class time! Good luck and have fun!

Appendix F

Authentic Assessment Lesson

Site B

PERSONAL PHYSICAL FITNESS PLAN

There are many health benefits that result from making and following a plan for physical fitness. In the space below, write those exercises that you choose for your physical fitness plan, and identify the body part or muscle group involved.

Exercise/Activity**Muscle Group/Body Part**

Warm up/flexibility

Cardiovascular endurance

Muscular strength and endurance

Cool down/flexibility

Appendix G
Multiple Intelligence Profile

Multiple Intelligences Self Profile

Directions

Step 1 - Read each statement.

Step 2 - Use the scale below, give each statement a number that best represents your response.

1 = Not at all like me.

2 = A little like me.

3 = Somewhat like me.

4 = A lot like me.

5 = Definitely me.

Section ONE

- _____ a. I have a deep sense of awareness of inner feelings, strengths, and weaknesses.
- _____ b. I have a strong sense of independence, strong will, and am self-directed.
- _____ c. I prefer my own private world/time to large group functions.
- _____ d. I like to be alone to pursue personal hobbies, interests, or projects.
- _____ e. I have a deep sense of self confidence.
- _____ Total

Appendix G (continued)
Multiple Intelligence Profile

Section TWO

- _____ a. I like being with people more than being alone.
 _____ b. I have many friends
 _____ c. I enjoy socializing in a variety of environments.
 _____ d. I learn best through cooperative activities.
 _____ e. I am good at communicating, organizing and sometimes
 even manipulating people.
 _____ Total

Section THREE

- _____ a. I learn best by moving, touching, and/or acting out
 information.
 _____ b. I process most of my knowledge through sensations.
 _____ c. I have well defined ability in fine and gross motor
 skills.
 _____ d. I enjoy taking things apart and putting them back
 together.
 _____ e. I can mimic other people's mannerisms well.
 _____ Total

Section FOUR

- _____ a. I enjoy reading, writing and listening.
 _____ b. I enjoy jokes, tall tales, and stories.
 _____ c. I easily remember names, places, dates, and other
 trivia.
 _____ d. I can spell accurately and have a highly developed
 vocabulary.
 _____ e. I like crossword puzzles or playing word games.
 _____ Total

Appendix G (continued)
Multiple Intelligence Profile

Section FIVE

- _____ a. I like to explore patterns, categories, and relationships of information.
- _____ b. I can compute math problems easily and quickly.
- _____ c. I can group, order, analyze, interpret and predict data.
- _____ d. I enjoy strategy games (e.g., chess) and like to win.
- _____ e. I ask a lot of questions about how things work.
- _____ Total

Section SIX

- _____ a. I think in images and pictures.
- _____ b. I like to draw, paint, sculpt and engage in other art activities
- _____ c. I use clear visual images when thinking about concepts and explaining information.
- _____ d. I can draw accurate representations of people or things.
- _____ e. I tend to daydream when learning new information.
- _____ Total

Section SEVEN

- _____ a. I am highly aware of sounds within the environment..
- _____ b. I typically play music when working or relaxing.
- _____ c. I can easily remember melodies of songs.
- _____ d. I generally know when music or a note is off key.
- _____ e. I like to sing, hum and keep rhythm.
- _____ Total

Appendix G (continued)

Multiple Intelligence Profile

To determine your most prevalent intelligence complete the following steps:

1. add the scores for each section and place number on the TOTAL line for that section.
2. take the total score from each section and mark the score on the graph.

Color in the area below the score to develop a picture of which intelligence(s) appears to be your area of strength or preference.

Intelligence Scoring Graph

25							
23							
21							
19							
17							
15							
13							
11							
9							
7							
5							
3							
1							
	Intrapersonal	Interpersonal	Bodily/ Kinesthetic	Linguistic	Mathematical/ Logical	Visual/Spatial	Musical

Developed by Anne Moll, KDE.

Note: In some instances there may be one or more intelligences in which you score similarly - this simply means that you have developed strengths in these areas. It is important to note that this survey is just a survey and in no way indicates your limitations or capabilities. It provides a snapshot of how you prefer to learn and approach problems and should be used as a tool for improving your performance in areas of strength and challenging yourself to improve in areas not considered to be strengths.

Appendix H
Multiple Intelligence Lesson
Site A
Bridge to Terabithia Project

Due Date:
(100 Points)

The project for this novel is one that should be fun for you. It stems from the work we did in class with the paper bag where you had to define what would be in your "Terabithia," your "perfect world."

You will be further defining the secrets of your perfect world. This will require a lot of thought on your part as you will have to give some structure to every aspect of your fantastical kingdom. Essentially, you will be making a scrapbook to illustrate the ideals of your perfect world. Make this as creative as you want -- use pictures from magazines or draw illustrations to help decorate your scrapbook. This should include:

• **5 points:**

Design a cover for your scrapbook. Make sure to include the name of your kingdom.

• **5 points:**

Write a dedication page. Dedicate your kingdom to someone special in your life, living or deceased.

• **10 points:**

Make a title page which explains in a focus and support paragraph the ideals of your fantasy world. For each ideal make sure to include why this is better than the world today. Use your imagination and give examples for each support.

• **10 points:**

Determine and write a creed by which all who live in your kingdom must abide. This can be in the form of a slogan or motto, but think about what a creed is to you as a system of beliefs. (Example- Live by the Golden Rule)

Appendix H (continued)
Multiple Intelligence Lesson
Site A

• **10 points:**

Write a journal entry for one day in your special world. This should include everything you might do on one "perfect day." (keep in mind the ideals you mentioned on your title page)

• **20 points:**

This is the major writing section of the project. You will write two focus and support paragraphs. In the *first* paragraph you will write about what you currently do to make the world a better place. Include what you do for your family, school, community and/or country. The *second* paragraph will be about improvements that we need to make to improve our world. Once again think about your family, school, community and/or country. This section should be at least **one page** in length!

• **20 points**

Create a visual of your perfect world. This could be a map, collage or a variety of things. Use your imagination--I know you are creative!

The contents of the scrapbook should be in the order I have them listed: starting with the cover page and ending with the visual. You may add anything else you like, but just make sure you have included everything that was required.

Give some thought to what an ideal place might be for you. Have fun!

Appendix I
Multiple Intelligence Lesson
Site B
Lesson: Fitness Trail

- Targeted Intelligence:** Interpersonal
- Supporting Intelligences:** Intrapersonal, Naturalist
- Social Skills:** Communication, Working in a group
- Content Focus:** Cardiovascular fitness
- Materials:** Clipboards, paper, pencils, markers, and stopwatch
- Task Focus:** Working in groups, students will develop and perform a fitness trail outdoors
- Product:** A map and directions for their fitness trail
- Problem:** To expose students to another method of improving their cardiovascular fitness
- Activity:**
1. Describe a fitness trail and the benefits of performing
 2. Give students the following specifics:
 - a. Use any of the outdoor facilities inside the fence line
 - b. Must have at least five stations
 - c. Must last at least ten minutes
 - d. Include a map, instructions and the names of the group members
 - e. All activities must result in improving c-v fitness
 3. Break into groups of three to four students each and hand out equipment
 4. Work on fitness trail
 5. Perform the fitness trail during the last ten minutes of the class
- Reflections:**
1. As a group, discuss the improvements needed to your fitness trail.
 2. As an individual member of the group, do you feel you contributed equally to the project? What was your role in the group? Were you a good group member?

Appendix J
Cooperative Learning Lesson
Site A

A lesson with fat/skinny questions

After your groups have been organized for you, you will need to create a study guide for our upcoming test using the concept of fat/skinny questions. Each group will be responsible for six skinny questions and six fat questions for their assigned lesson. After you complete the questions, please turn them in and I will sort them in our review sheet. This will be used to prepare you for the test on Thursday. Again, do not search for questions that are trivial in nature, rather, concentrate on the material that is useful in the understanding of the fall of the Roman Empire.

Completed Student Study Guide

1. What factors led to the collapse of the Western Roman Empire?

2. What ways did people from different cultures benefit from contact with each other?

3. What were the 3 things the Byzantine Empire created?

Appendix J (continued)
Cooperative Learning Lesson
Site A

4. What did China import to the East?

5. How did Diocletian strengthen the Roman Empire?

6. What did the Persians have at their rest stops? Why?

7. Who established the 4 empires? _____

8. Who killed Julius Casear ? _____

9. Who restored Hagia Sophia? _____

10. Which Chinese dynasty lasted the longest? _____

11. What was the city of Byzantium renamed? _____

12. What was the Roman definition of a barbarian? _____

13. What nation modeled their law after the Justinian Code? _____

14. Who was the "Father of History? _____

Appendix K
Cooperative Learning Lesson
Site B

Lesson: Original Games

Targeted Intelligences: Verbal/Linguistic, Visual/Spatial
Supporting Intelligences: Interpersonal, Bodily/Kinesthetic
Social Skills: Communication, Working in a group
Content Focus: Students devising rules
Materials: Paper, writing utensils
Task Focus: Working in groups, students make up a game,
unlike one that currently exists
Product: An original game
Activity:

1. Give students the following specifics:
 - a. Make up a game, unlike one that currently exists.
 - b. Must include an explanation or description of the game (i.e. how do you win?).
 - c. Must include a set of rules and penalties.
 - d. Include a description or drawing of the field or court with the dimensions and boundaries.
 - e. Needs to be a reasonable, playable game with proper safety considerations.
2. Break into groups of two to four students and distribute materials
3. Give class time to work
4. Close with class reflection

Reflections:

1. What made this activity difficult? Easy?
2. How did you work as a group on this task? Were there compromises made?

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