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Homework and Student Motivation

By:

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August 1, 2008

A thesis submitted to the

Department of Education and Human Development of the

State University of New York College at Brockport

in partial fulfillment of the requirements for the degree of

Masters of Science in Education

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Homework and Student Motivation

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Chapter I: Introduction

INTRODUCTION

After much thought and contemplation, my research topic is student motivation and homework completion. I have become increasingly concerned with the lack of effort and completion of homework with my eighth grade students, not only in math class, but all subjects across the board. It seems as if homework has no meaning or value to many students. I am curious as to why that is, and out of concern, I want to know how I can help change that perspective of not only my students, but all students that lack in their homework completion.

I have always thought of homework as valuable practice to strengthen and reinforce the learning taught, as well as, a chance for students to find areas in need of improvement or guidance. I started thinking to myself, why would a student do homework? What is it that motivates them to complete it? This thought became the basis for my thesis... what motivates students to do their homework and how can we use that motivation to improve the lack of concern for homework that I currently see in my classroom and the classrooms of others?

This research area has significant positive outcomes. By finding out what motivates students in general, then applying it to the homework issue, I can only imagine homework completion to increase drastically. This may not be a rapid increase, but I feel as the years continue, educational values will be harder to implement in society and what better way than to use student interests to motivate them with the homework struggle. What student wouldn't love to have a reward that suited their interest?

However, with any situation, there are possible gaps or negative outcomes. Perhaps parent's educational knowledge will interfere with student motivation to do homework. Families

with little education may put less value on their child to receive a good education and to do well, or they may not have the educational background to help their children with increasingly challenging homework.

Through literature review, I will start with what homework is defined as and what its purpose is intended to be, as well as why there is a need for motivation. After extensive reading, I have found a few recurring issues associated with motivation to do homework. Articles frequently mentioned intrinsic (our ultimate goal) and extrinsic motivation which I then felt important to define and explain. From there I found some central issues about how we motivate with rewards and grades (extrinsic motivation), on how to use student interest, on how to motivate with students desire to please peers, parents and teachers, and how family lifestyles influence and hinder motivation. This background knowledge and recurring issues became the outline and focus for my thesis and research study.

The studies I have conducted on homework and motivation were intended to find if the extrinsic motivation of rewards would have a significant impact on the completion of homework. I was also curious to find any individual and peer influences on motivation. I was interested to find where the source of motivation came from and if it would eventually lead to our ultimate goal of intrinsic motivation. I am confident that I will not only increase the homework percentage rates, but also raise the level of intrinsic motivation across the board.

. . .

PROBLEM STATEMENT

Homework has been a frequent battle and concern for teachers and their students; however, it seems more prominent in today's society than in the past. The lack of homework completion often leads to the question of why give homework? What is the purpose intended to be? What do we do for those that do not do their homework? The list of questions can go on. I have pondered over these questions and thought to myself, how can we motivate students to do their work so they can become successful, educated adults? I want to find out what sources of motivation (intrinsic and extrinsic) would give students the ambition to complete assignments for the better of their education.

SIGNIFICANCE OF THE PROBLEM

Homework, when used correctly, reinforces the topics learned in class. The practice outside of the school setting gives students their own perspective of learning. Did they grasp the material taught? Do they have questions for the teacher on what they may not understand? As the homework process is completed, students reflect on the material and internalize it for future use.

PROJECT DESCRIPTION

This paper will describe the research on the effects of motivation and homework completion. Through extensive research, there are common and contradicting central issues found that will be discussed.

Two action research studies have been conducted, all in the eighth grade classrooms on the effects of extrinsic incentives on homework motivation. The first was a week trial on the reward of a candy bar of their choice for those who completed their homework every day for a week straight. Not content with the findings, I continued the study for another week. The ultimate goal here was to see individual motivation. The second study was a twelve day pizza party competition. Students competed in classes for the reward of pizza for the class with the highest homework average after the twelve days. The ultimate goal here was to see peer motivation as well as individual motivation for the reward.

Chapter 2: Literature Review

WHAT IS HOMEWORK AND ITS PURPOSE?

There have been many different views of how homework is defined and what its purpose is meant to be. Estyn (n.d.), Bempechat (2004), and Hong E., Millgram R.M., & Rowell L.L. (2004) all agree that homework is the tasks that teachers assign to students that are meant to be completed during out of school hours. They also have similar perspectives of the purpose of homework. Bempechat (2004) believes, "Homework assignments provide children with the time and experience they need to develop beliefs about achievement and study habits that are helpful for learning, including the value of effort and ability to cope with mistakes and difficulty" (p.189). She also found that, "A great deal of research evidence now demonstrates that academic achievement is positively related to the homework completion regardless of students' ability or prior coursework, the amount of time they devote to homework increases their achievement"(p.191). The author of "Homework in Primary and Secondary Schools" (2004) feels the value of homework is meant to:

- Enable pupils and students to cover more subject content than is possible in lessons alone;
- Provide time for essential learning activities that do not require the presence of the teacher;
- Provide time researching information, re-drafting or working with others;
- Enable pupils to review knowledge and skills taught in class and to develop and pursue new interests;
- Encourage independent study skills and reflection; and
- Allow individuals to work at a pace that is appropriate to their abilities.

All in all, the authors agree that homework in meant to assist with learning, not hinder it.

WHAT IS THE NEED/REASON TO MOTIVATE STUDENTS?

Dr. Mary Ann Smialek (n.d.) said, "Motivation is the key to success" in her article "Roadblocks to Motivation". She expressed how motivation is the driving force to encourage student incentive to do not only homework, but any work asked of them. She thinks that with a lack of this incentive, students will not work effectively and efficiently in school related tasks. Smialek (n.d.) also stresses that many students seek extrinsic reinforcements to motivate them, specifically with grades and rewards. Her thoughts are that finding what motivates students and using their motivational interest in school related tasks, will increase learning and attitudes of school. "Motivating Students" (n.d.) suggests many ways we can motivate students. It is suggested that we work from the students' interests, get to know our students, vary our teaching methods, give feedback often, reward success, be specific in expectations, and avoid negative and demeaning comments. I would like to focus my thesis on the use of student interests, their desire to please peers, parents and teachers, and rewards as means of motivation.

INTRINSIC VS. EXTRINSIC MOTIVATION?

Knollman, M. & Wild, E. (2007) defined in their article, "Intrinsic motivational orientations can be broadly defined as habitual tendencies or actual intentions to get engaged in learning because learning itself is valued as interesting and enjoyable or otherwise satisfying. Extrinsic motivational orientations are commonly defined as tendencies or interactions to engage in learning in order to obtain consequences that are not immediate or a constitutive part of the learning activity. It can further be divided into tendencies or interactions to achieve positive consequences such as good grades, other students' approval and tendencies or interactions to

avoid negative consequences such as getting bad grades or being perceived as incompetent by others" (p.64). Knollman, M. & Wild, E. (2007) conducted two studies to ascertain the value of intrinsic and extrinsic motivation. The first study took a random sample of 181 volunteer sixth graders and their families from an urban population in Germany. The students and families were given a self-report questionnaire, using a likert-scale, during a one hour visit that assessed students' intrinsic and extrinsic motivation. Their hypotheses were tested using a two-way ANOVA and found neither to be a main effect for motivation. Not pleased with the outcome, a second study was conducted with the same sample of students and families, but this time students had to complete a "homework diary" (journal type entry) immediately after finishing their homework. The study found that there was a correlation between intrinsic and extrinsic motivation. "Intrinsic motivation was positively correlated with joy and pride, but not with anger and anxiety. For extrinsic motivation, negative correlations were found with pride and joy, but not with anger and anxiety" (p.69). However, it seems after researching, most students in today's society focus on extrinsic motivation rather than intrinsic which contradicted the study previously mentioned. Dr. Smialek (n.d.) found that extrinsic motivation often leads to intrinsic motivation in the sense that striving for a reward, good grades, parental, peer, and teacher approval, will eventual lead to a personal reward of achievement and an endeavor to deeper learning.

HOW CAN WE MOTIVATE WITH REWARDS AND GRADES (Extrinsic Motivation)?

Student's motivation to do their homework for rewards or grades is known as extrinsic motivation. The author of "Motivating Students" (n.d.) mentions that rewarding success is a key to motivating students in that it, "builds students' self-confidence, competence, and self-esteem." West S. & Uhlenberg D.(1970) explains how multiple rewards help to motivate students toward the goal of winning perhaps a pizza party, or whatever the prize/reward may be. However, she notes that it does not always represent academic motivation. By this she means that yes, students are doing their work, but it is for the purpose of the reward offered not for the learning. She found that students were striving for the reward and not the quality of work and learning the reward hoped to achieve (p.48). Hunt (n.d.) agrees that although rewards seem more appealing than punishments, rewards have the weakness that if no reward was offered, perhaps the task would not be accomplished without the reward! She also suggests many messages that extrinsic rewards give students. She feels that they portray the message that students will not recognize what is important in life if there is no reward associated with it. Also that students will grow up unable to make their own decisions, always seeking for "expert" advice.

Grades are another extrinsic motivational piece for many students. They do their homework to keep their grade point average (GPA) above passing. For many students this is enough to motivate them to do their homework, unfortunately for many it is not. However, using grade point averages to motivate students is also not an accurate form of motivation as far as measuring achievement according to West S. & Uhlenberg D.(1970, p.48). They found that this motivation to get homework done just to keep up individual grades does not control ability levels, hence not correctly measuring academic motivation. She also mentions that to use grades is not academically accurate in the sense that homework allows for "intervening variables" (help

from others) that affect the grades. Renchler (n.d., p.14) agrees that, "grades are obviously an incentive of great importance to most students, but the use of grades as an incentive or as a form of punishment can have long-term impact on student motivation" either positively or negatively associated with it. In a study done by Ames and Ames (1990) as mentioned in Davis, B.G. (1999), two math teachers and their homework practices were investigated. One teacher graded homework and counted it for 30% of the students' grades. Another teacher had students spend 30 minutes on the homework each night and bring questions about the homework to class the next day. They were given a grade of satisfactory or unsatisfactory based on effort. Grades were 10% of this teacher's student's grade. The study found that the second teacher was more successful in motivating her students to do homework than the one who graded assignments. Thoughts were that the first teacher caused students to give up when frustrated or confused with the homework knowing they would receive a failing grade whether they did the homework or not. The second teacher encouraged questions to learn and allowed for students to try even if they could not do the problem. From this study it was found that teachers should de-emphasize homework associated with a large part of the grades.

As studies found, rewards and grades have both positive and negative results regarding their motivational influence on students and achievement with school tasks such as homework. However, "Students Motivation to Learn" (n.d.) states, "Extrinsic rewards, on the other hand, should be used with caution, for they have the potential for decreasing existing intrinsic motivation."

HOW CAN WE MOTIVATE WITH STUDENT INTEREST?

According to "Students Motivation to Learn" (n.d.) finds that students become bored with school and become uninterested. They often see no purpose and value to what is being taught. If students found the material to be relevant to the real world and how the skills will be needed and used in real life, it will promote motivation and engagement through interest in the topic. It is true that it is not possible to link interest to every topic, the more educators are able to find ways to link real life and student interest to the material, them more motivated students will be come.

HOW CAN WE MOTIVATE WITH STUDENTS DESIRE TO PLEASE PEERS, PARENTS, AND TEACHERS?

Bempechat (2004) found through their own research that, "Parents' and teachers' beliefs about learning have a profound influence on the development of children's own beliefs about what it takes to do well in school, as well as their efforts to learn and apply themselves." Parents and teachers can affect student motivation to do their work though their beliefs and students desire to please. Corno (2000, p.534), had similar research results in that she found, "Through intrapersonal contact with their children, parents of beginners can diffuse frustration, provide rewards for good work, and generally play a positive role in this new experience of doing homework." Through her case study of six families with third grade students beginning to learn to do homework for the first time, she found that homework assisted by parents helped students to not only learn personal responsibilities but become aware of intrinsic reasons for doing homework. They would engage in discussions with parents and teachers with excitement and curiosity that continued their motivation due to the praise and interactions that occurred (p.538).

Peers can be a large influence in students' views on school, homework and their motivation to succeed. Corno (2000, p.532) found that peer groups had similar styles and expectations of school. A peer group that values education will be highly motivated to do well and help each other. On the other hand, a peer group that is has less value will influence the group members negatively, hindering their motivation. One important downfall a peer group has on each other is the highly competitive nature that may lead to dishonestly and cheating within and outside of peer groups. The benefit of using peers for motivation is the ability to help each other to learn and work together. Studies have found students learn can learn more by re-teaching and explaining (p.535).

The qualitative research study by Hufton, N.R. & Elliott, J.G. (2002), took the three countries of England, USA, and Russian Federation and compared the different educational motivation and engagement across the countries. That study found that in countries where education was highly valued (Russia); students strove to be the best since the best were respected and idolized in their country. However in the USA and England, students viewed those that achieved highly as "nerds," "geeks" or "swots." They gave a negative title that many students did not want to associate themselves with, hence purposely hindering their motivation to achieve academically (pp.276-277).

HOW DOES FAMILY LIFESTYLES INFLUENCE MOTIVATION?

The lifestyles of family home life has drastically changed over the years when mothers were stay-at-home moms and education was highly valued. According to Corno (2000, p.533) today there are roughly 60% of mothers who work outside the home, many of whom work

nights. There is a wide range of family lifestyles in our present, changing society, where more and more families are broken and have single parents working two or more jobs to survive. Many of the research articles have agreed that parental views on education and homework are directly related to their child's view of education and homework. Bempechat (2004, p.192) stated, "At all ages, children's attitudes about homework were positively associated with parents' attitudes. And, in the higher grades, students' attitudes about homework were directly predicted by their parents' attitudes, which were positively and directly related to their children's school performance. For some students in the study, the lack of positive effect of homework on achievement may have been the result of their parents' own negative attitudes." Corno (2000, p.534) has a very similar view that family's ability to help with students' homework can influence students' academic values and achievement. David McClelland, a prominent figure in motivational research, investigated the differences in child upbringings in various societies and cultures and found, "child-rearing practices that emphasize independence training and mastery produce people who are high in achievement motivation" according to research from Renchler (n.d.). All three authors express the value of a parent just being home and available to help if needed was more effective than a parent who worked and left the child to do homework on their own. However, Xu, J & Corno L. (2003) had a contradictory outcome from their study. In their study they took random sample of 140 diverse students from a middle school in NYC and gave them a survey on what the relations between family homework help and student achievement were, as well as the relations between the parents' educational level and student achievement. Contradictory to what the author predicted, and what many researchers found, the outcome of the study was that there is no significant difference in either case by the use of T tests combined with Z score (p.510). Hence, "there were no differences in achievement between middle school

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students who said they had help with homework from parents and those who did not. Nor did helper's educational level relate to academic achievement in this sample" (p.512). Although a contradictory finding, many students admitted they were most attentive and focused to their homework when a parent was present and available for help then when completing it on their own or with a peer. Having the presence redirected their attention to the homework, giving motivation to continue on (p.505).

Bempechat (2004, p.193) found that parents, who create a routine for homework and model how to manage their time, deal with frustration, use resources available and take their time, yield greater success. Those that have the highest accomplishments are those who have effective work ethics and routines says Corno (2000, p.532). The place where students choose to do their homework can also have a significant impact on their motivation to do their homework. In the past it was found that the best environment for homework was a quiet setting at a desk with minimal distractions. In a survey of middle school students today, 49% do their homework with the television on and 58% listen to music while they worked. Students found music to be an encouraging motivator during homework completion, but the television became more of a distracter, as well as the telephone according to Xu, J. & Corno, L (2003, p.504). The same survey found 36% of students would make consistent effort to arrange a homework environment with minimal distractions.

A common recurring theme found in many articles was the idea to start young with homework and motivation. In Bempechat (2004) article, "Overall, the research suggests that assigning homework in the early school years is beneficial more for the valuable motivational skills it serves to foster in the long term, than for short-term school grades. Undoubtedly, parents are in greater position to influence their children when they are younger than older."

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CONCLUSION

During my research, many contradicting studies were found. Some supported the ideas and methods to assist with motivating students to do homework, while others disapproved, or found through studies and research, that the theories held untrue or of no significant difference. The central issues I found throughout my literature review involved the differences of intrinsic and extrinsic motivation , motivation with rewards and grades (extrinsic motivation), motivation with the use of student interest, motivation with students desire to please peers, parents and teachers, and how family lifestyles influence and hinder motivation.

All the articles I read agreed on the definition and purpose of homework assigned in schools. They all agree that homework has value and is important for many reasons and that motivation is a key aspect to increasing homework completion. This encouraged me to know that homework was of value, and that I was doing the right thing by giving homework to my students and stressing the importance of it. The differences in views involve how the assignment is given, graded, the types of motivation used and the influence of others, mostly parents and peers, on the assignment.

A major disagreement I found was the use of intrinsic verses extrinsic motivation. There were many contradicting view points; the most common I found was that extrinsic motivation hinders more than it helps and that intrinsic is the way we should be motivating, yet we focus on extrinsic due to the rewards and eye catching appeal that students have for it. I began to think of the ways that I motivate students to do homework as far as extrinsic and intrinsic motivation goes. I found that many motivational aspects I give my students are extrinsic. I provide rewards of pizza parties and bonus points for classes with the highest average and use grades as

motivation when research clearly states that we should de-emphasize grades. My biggest concern is how do I get students motivated intrinsically when they have such a hard time motivating themselves and have little care about their education?

It seemed obvious to me that teachers, parents and peers would have the greatest influence on student motivation and, in turn, impact homework completion. I found many statements that strengthened my view but of course there were opposing or surprising findings as well. I truly thought that family life and parent's educational background would have significant impact on students' motivation to do their homework. Some research studies found students achievement and attitude about school and homework correlated to that of their parents, which is what I went into the research thinking. However, a study found that there was no significant difference or influence on parental help on homework or parental educational levels to student's achievement. To me these were two completely contradicting studies that left me unsure what was true! Perhaps this is an area I will spend more time researching for my thesis. As far as peers influence, I completely agreed with the findings. Students strive to fit in to their social groups in school, giving peer's greater influence over them than they have on themselves.

One of the topics I thought would yield the greatest results for motivation was the use of student interests and real life. I found very little high quality journal research and studies on this issue, which was of great surprise to me. This is another area that I will spend more time on when researching for my thesis. The lack of research I found on this topic has encouraged me to do my own research on it. I plan to vary my homework assignments and test which ones yield the highest completion. I am curious if real life applications will have higher completion than practice text book problems.

I feel, after reviewing numerous research articles ranging from high quality journals to internet articles, there is enough research on my topic of motivation and homework. However, I did find a few areas, as I have mentioned, where more extensive research will need to be conducted and investigated to generate more accurate results. I am pleased and surprised by the research found on my topic of motivation and homework. I look forward to my own studies where I can find out what motivation suits my students best. I will take the research findings and knowledge I have learned involving students and their motivation to heart and implement it properly in my classroom and assignments.

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Chapter 3: Action Research (First)

CHALLENGE/ISSUE

The topic of homework has become a growing concern of mine. I noticed each day the lack of homework completion by my students, not just in math, but all subjects. It seems as if homework has no meaning, and is of no concern to them. I became curious as to why students chose not to do their math homework when its purpose was to strengthen and reinforce their learning. I decided to take my curiosity and concern for the lack of homework completion and see if extrinsic motivation would improve the completion of homework and in turn improve student grades.

GUIDING QUESTIONS

How do rewards as extrinsic motivation increase the homework completion percentage for the completion of all homework? What are students' perceptions of the effects of homework completion and motivation? Is there an individual intrinsic motivation behind the completion?

HYPOTHESIS

For the purpose of this research, I hypothesize that the homework completion percentage will increase as a result of being given an extrinsic reward for their accomplishment. I also hypothesize that students will find both intrinsic and extrinsic motivation as a means of personal success in the completion of homework.

PARTICIPANTS IN STUDY

For this Action Research I chose to focus on one of my "average" Math 8 classes. The class consisted of fifteen students in the eighth grade whose ages range from twelve to fifteen. I picked this class due to the wide range of diversity amongst the group. The population is Caucasian with a mix of African Americans and Hispanics. This class has eight males and seven females where ten are Caucasian, one African American, and four Hispanic. One of the males is autistic with a 1-1 aide to assist him, while another male is ADHD who needs constant cues to stay focused. I also have a female who has a 504 plan that needs to be considered. There is one male in the class who was retained, and one female who is new to the district and started in mid-October. Many of the students' families are low income which qualifies our district for free breakfast and lunch programs.

METHODS/PROCEDURES

This study was conducted in my current classroom where daily practices did not need to change to accommodate for this research. At the beginning of my first week of the action plan, students took a homework survey based on the past few weeks of homework. I then explained my plan for the week: if students did their homework for a week, on time and complete, not necessarily 100% correct, they would receive a candy bar of their choice. This seemed to be a simple motivational strategy and reward that I thought would be encouraging for middle school students as well as contribute to student learning and achieve my goal all at the same time. Each night I gave the students a worksheet of ten questions that were based on the lesson taught that day which was aligned with the NYS curriculum for 8th grade mathematics. Each day I would

check the homework with my usual 4 -scale method based on effort not accuracy (4 -all complete, 3 -most complete, 2 -half complete, 1 -few complete, and 0 -not complete). For the purpose of this study, I only focused on those who were all complete, the 4's, since my goal was to see if the extrinsic motivation would encourage full homework completion. Not content with the results after one week (four days), I decided to continue the study another week (four days) for a total of eight assessments. At the end of each week the students who completed 100% homework completion were given a candy bar of their choice, giving students two opportunities for a reward and to show motivation. After the second week, a post survey was given to assess the study, perceptions and motivation.

I made sure to keep the length and difficulty of the homework consistent. All eight of the assignments were on the last page of the class packet we were working on; this way students could look back at the similar class work and notes to help guide them. They had homework every night during the study and it was graded the same way each day, four points an assignment based on effort. The two weeks consisted of the topic of solving equations and inequalities which consist of the same idea and steps. I used the same class throughout the study, during the same time of day each week. I also let the study hall teachers know of this research study to minimize their help that might alter the validity and accuracy of the study. I did not change anything for this study except to offer the reward of a candy bar to those who complete all assignments each week as means of motivation for homework completion.

TIMETABLE

October 1, 2007 – October 12, 2007:

- Identify a plan for the research study.
- Develop questions and hypotheses.

October 13, 2007 - October 26, 2007:

- Develop materials for study (homework assignments, surveys).
- Collect initial data from 5week grades (the homework percentage prior to study).

October 27, 2007 - November 2, 2007:

- Administer pre-study survey on prior homework and motivation perceptions.
- Explain to students about the study, purpose, goal, and incentives.

November 3, 2007 - November 9, 2007:

- Students are given a week (four days due to a conference day) of assignments to complete for the incentive of a candy bar of their choice.
- On the Friday of that week, students who have 100% homework percentage for the week will pick a candy bar for their reward.

November 10, 2007 – November 16, 2007:

- Students are given a week (four days due to Veteran's Day) of assignments to complete for the incentive of a candy bar of their choice.
- On the Friday of that week, students who have 100% homework percentage for the week will pick a candy bar for their reward.

November 17, 2007 – November 21, 2007:

• Students will complete a post-study survey.

November 22, 2007 - December 2, 2007:

- Analyze data gathered from homework completion records and surveys.
- Write a report describing the results of the research and the implications and future procedures.

December 5, 2007:

• Present results and outcomes to EDI 686 class.

DATA COLLECTION

- Daily homework charts filled out by the teacher
- Surveys given to students pre and post study
- Prior homework averages from Gradebook the schools computer program

Chapter 4: Results

DATA ANAYLSIS

(See Appendices A, B, C & D)

In the first homework survey I gave my students (see Appendices A, page 41-42), question

number two asked: Why do teachers give homework and what is the point of it/is it necessary?

Students' results were as follows:

- A way to learn outside of school
- To practice what you learn and help you understand it
- Way for teachers to make us do work
- Lets teachers see who was paying attention in class
- To get better at math/smarter
- No it is not necessary
- I get it in class
- It's stupid

Some students have a similar view of homework as teachers, while others have the view I would expect- one that thinks homework is unnecessary or stupid. I was rather surprised when going through the surveys at the amount of students who said that homework was a way to practice what you learned (or a similar version of this). Many of the students who do not do their homework clearly had the right idea of why they are given homework, they just make the choice not to do it even thought they know its value. When I asked students why they choose not to do their homework, they had a variety of responses that are shown in Appendices B, page 43. From analyzing the responses in Appendices B, page 43, students clearly are aware of the fact they have the abilities to do the assignment. There are only two students whose actual difficulty with the learning causes them not to complete the assignment. This makes sense to me because I have three students in the class with learning disabilities. For the most part students either "always do the homework" or "they are too lazy." However, there are a majority who feel that there is not

enough time to complete the assignment due to having too much homework in other subjects. I decided to see what other types of motivation do students have to help them succeed. I asked students, "What would or does motivate you to do homework?" Their responses are:

- Good grades so my parents will be proud
- Extra credit
- Candy /gum
- Parents
- Nothing
- Having a consequence for not doing the homework
- Sports
- Helps me to learn and get a good grade
- So I can play my video games when I get home

It seems after reviewing student responses that students already have influences to motivate them. If this is so, why has there been a lack of homework completion given the motivation and reward? This question still concerns me even after I performed my action plan.

The table in Appendices C, page 44 shows students homework completion percentage for eight assignments before the study and for the eight assignments during the study. The percentages are from Gradekeeper, our school grade program. I have concluded from the table in Appendices C, page 44 that the motivational rewards for homework had a 60% success rate. There were nine out of fifteen students who either remained the same or increased their homework percentage. During each week I gave out nine candy bars to these students for their reward. However there is a 40% failure rate of this study; six of the fifteen students did worse in homework completion with the reward of a large candy bar for motivation. When I break this data down even further, six students decreased in homework percentage, five students increased, and four students remained the same. From this data, 40% decreased, 33% increased and 27% remained the same. By breaking the data down this far, it seems as if giving a reward of candy as means of motivating students to do their homework was a failure since a higher percentage of students decreased in percentage than increased.

INTERPRETATION OF RESULTS

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In a second post survey (see Appendices D, page 45), I asked the students, "During the past two weeks, has the reward of candy motivated you to do your homework?" Of my fifteen students, eight said yes, giving a percentage of 53%. Meanwhile, seven said no, giving a percentage of 47%. This is a very close percentage telling me either it did or it did not (50%) help to motivate and reward students. When I asked them to explain why, it was also clear that there was a 50-50 percentage. It also made sense to me since the success and failure rate of the study were around 50% as well. Their explanations to the questions are as follows:

No responses:

- I do my homework anyways
- I do not care
- I can buy my own
- I do not like candy

Yes responses:

- It's a reward to enjoy
- I like to get rewards
- It made me work harder on my homework
- Helps me to get a lot of math work done

I then asked them if they thought rewards were a good motivational piece to encourage homework completion. Thirteen students (87%) responded that yes it was a good motivational piece, leaving only two students (13%) who felt otherwise. This rather surprised me. I expected it to be closer to 50-50 like the previous question but it was clearly obvious that students are aware of its motivational value. When I asked students to explain why, they responded with:

- It's a bribery
- People who normally don't do homework may do it for candy
- Some people need motivation to help them do well
- It can make you feel better
- It helped me to be a little happier to do the homework
- It makes you want to learn

Rewards as means of motivation to encourage completion seems well understood and accepted by students. They have the right idea why rewards are used as motivation by teachers.

My thought after this study is that using rewards, as means of motivation for homework completion seemed to have little effect on increasing homework completion. I found that there was not a huge correlation between rewards and motivation. It seemed that the same students not turning in their work are the same students not taking advantage of the reward and vice versa. I think if I were to repeat this study I would have done it farther away from Halloween. I worry that perhaps they had their "fix" of candy during the holiday that during my study the first two weeks of November may have been too soon after for it to be fully effective. Chapter 5: Action Research (Second)

CHALLENGE/ISSUE

The topic of homework continues to be an area of weakness for students in my classroom. Students are not completing the homework that is intended to help them succeed and become educated young adults, the future of our society. I decided to continue my research with this study to find out why students chose not to do their math homework when its purpose was to strengthen and reinforce their learning. My intention is to see if extrinsic motivation would improve the completion of homework through peer competition.

GUIDING QUESTIONS

How will the level of student's homework completion rate change when given an extrinsic incentive of a pizza party competition? What are students' perceptions of the effects of homework completion during this study? How do peers influence the motivation?

HYPOTHESIS

For the purpose of this research, I hypothesize that the homework completion percentage will increase as a result of being given an extrinsic reward for their accomplishment. I also hypothesize that students will find both intrinsic and extrinsic motivation as a means of personal success in the completion of homework.

PARTICIPANTS IN STUDY

The population of study is taken from an average, public middle school in Newark, NY. The population is Caucasian with a large mix of African Americans and Hispanics. Many of the students' families are low income which qualifies our district for free breakfast and lunch programs. Our New York State Mathematics test scores have become increasing low causing us to be on an improvement plan as of the start of the school year, September 2007.

There are a total of eighty students involved in this study split into five classes. Period two has twenty-six students, period four has twenty students, period five has ten students, period six has nine students and period nine has fifteen students. All subjects are eighth grade students at Newark Middle School. There is a large range of abilities among the classes. Period two is accelerated taking Integrated Algebra, period four and nine are "average" Math 8 classes, period five and six are "below average" Math 8 classes. Among all classes there are students with 504 plans, IEP's, and various learning disabilities.

METHODS/PROCEDURES

This study was conducted in my current classrooms where daily practices did not need to change to accommodate for this research. On the day before the study was to be conducted, I explained my plan to the students: to have a homework pizza party competition where students are expected to do their homework every day for twelve days, on time and complete, not necessarily 100% correct. The class with the highest homework percentage after the twelve days would receive a pizza party provided by myself during the lunch period. This seemed to be a fun motivational strategy and reward that I thought would be encouraging for middle school students

as well as contribute to student learning and achieve my goal all at the same time. Each night I gave the students a worksheet of ten questions that were based on the lesson taught that day which was aligned with the NYS curriculum for 8th grade mathematics. Each day I would check the homework with my usual 4 -scale method based on effort not accuracy (4 -all complete, 3 -most complete, 2 -half complete, 1 -few complete, and 0 -not complete). For the purpose of this study, I only focused on those who were all complete, the 4's, since my goal was to see if the extrinsic motivation would encourage full homework completion. I also gave students the last five minutes of every class to start the homework assignment and ask questions. At the beginning of class, after checking the homework, we would add the data to the pizza party competition board so students in all classes could monitor progress of their class, as well as the other classes. After the study was conducted, a post survey was given to assess the study, perceptions and motivational influence. Following the study and the surveys, I conducted ten interviews with a random section of the population. The selection was two students per each class, giving a total of ten student interviews. Names were picked out of a hat for random selection in each class. The interviewers responses were hand recorded with responses to the studies at question. The interviews were to give me a personal view on homework and motivation that contains more feeling and truth than perhaps a short anonymous survey may show.

I made sure to keep the length and difficulty of the homework consistent. All twelve of the assignments were typed on one sheet and had a similar look to them. They had homework every night during my study and it was graded the same way each day, four points an assignment based on effort. The twelve assignments consisted of the topic of graphing equations which consist of the same idea and steps. I also let the study hall teachers know of this research study to minimize their help that might alter the validity and accuracy of the study. I did not change anything for

this study except to offer the reward of a pizza party to the class with the highest homework average as means of motivation for homework completion.

TIMETABLE

April 11, 2008 – April 20, 2008:

- Identify a plan for the research study.
- Develop questions and hypotheses.

April 21, 2008 – May 4, 2008:

• Develop materials for study (homework assignments, surveys, interviews).

May 5, 2008 - May 12, 2008:

• Explain to students about the study, purpose, goal, and incentives.

May 13, 2008 – May 30, 2008:

• Students are given 12 assignments to complete for the incentive of a pizza party for the class with the highest homework percentage.

June 1, 2008:

- Results of the survey are discussed and students are told the winning class.
- Students will complete a post-study survey.

June 2, 2008:

• The winning class will have a pizza party during lunch.

June 2, 2008 – June 13, 2008:

• Interviews are conducted randomly.

June 14, 2008 – June 26, 2008:

- Analyze data gathered from homework completion records, interviews and surveys.
- Write a report describing the results of the research and the implications and future procedures.

August 1, 2008:

• Present results and outcomes in Thesis paper.

DATA COLLECTION

- Daily homework charts filled out by the teacher
- Homework competition board for students to keep track of
- Surveys given to students post study
- Interviews

Chapter 6: Results

DATA ANAYLSIS (See Appendices E, F, G, H & I)

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According to the data in Appendices G, page 50, the student homework completion percentage increased as the twelve days progressed for all five classes when given the extrinsic reward of a pizza party to the class with the highest average. When comparing the first day of the study to the last day of the study, period two increased 8%, period four increase 45%, period five increased 20%, period six increased 67% and period nine increased 20%. As an all classes average (see Appendices I, page 52), the homework percentage increased 32% from the first day to the last day. When looking at the averages per day, they showed growth from beginning to end in each class. However, it is observed that the end of the weeks had higher averages than the beginning of the weeks, giving an inconsistent growth pattern.

INTERPRETATION OF RESULTS

When I analyzed the data through student surveys (see Appendices E, page 46-47 and Appendices J, page 53), I found very interesting results. In the first survey question: "Did the reward of a pizza party motivate you to complete your homework? Explain why or why not," of the students who completed the survey, 46% said yes it motivated them while 54% said no, it did not. I found this very interesting since data shows growth throughout the study. Here are some reasons why students say they were not motivated and were motivated:

No responses:

- I do my homework anyways
- I do not care/am lazy
- I want good grades/to pass, so I do my work
- It is just food/I can have pizza anytime
- I do not like pizza

Yes responses:

- I like/want pizza
- I didn't want to let the class down
- I want the reward/to win
- I like competition
- It's something fun to work towards/ exciting

It seems that there is a wide range to those who said no and yes to self motivation in this survey question.

The second survey question asked: "Did your peers motivate you to do your homework since the reward was class based? Explain why or why not. I was not surprise to find out the exact same percentages of students said yes and no as the first question. However, I was surprised to see that it was not all the same students who said yes and no in the first question. As I was sorting them out, opinions switched for many students so it seems many who had no personal motivation had peer motivation (34%) but those with personal motivation had no peer motivation (47%), a very interesting fact to find. Here are some reasons why students say they were not motivated and were motivated by peers:

No responses:

- Many don't do their homework anyways
- I do my homework regardless
- They do not care
- I was the one to motivate/encourage them

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Yes responses:

- We helped each other to get the pizza
- They put pressure on me/reminded me
- I didn't want to let the class down/have them angry at me
- I liked to compete with my peers

There was an overwhelming amount of students who said they were the motivators among the no responses and an overwhelming amount of students who said they didn't want to let the class down among the yes responses. From this data, I would conclude that peer motivation has a large impact on student completion of homework. Students were helping each other by motivating and encouraging homework completion which did in turn help students complete their work, for the most part.

When I asked students, "Do you think the homework competition was beneficial to helping the homework issue (to encourage more homework completion)? Explain," there was unanimous agreement of 88% that said, "Yes it helped." Even though not everyone may have had a personal intrinsic motivation or a peer motivation; it seems they felt this homework competition has been successful to help assist the homework issue we had been facing for quite some time, and in turn, increase the homework percentages.

To investigate these findings further, I interviewed ten students, two students per each class. To keep the confidentiality of the students, I will call them Student A through Student J (see Appendices F, page 48-49). Most of the students had a negative view of homework when asked: "What comes to mind when you hear the word homework?" Responses included: "Why? You're in school for eight hours and still have to go home and do more work," "more work to do," and "work for grades." The students feel that homework gives a negative emotion associated to it, which may be why there is such a large homework issue. I then proceeded to ask them, "What influences you most to do your homework?" where I found seven out of the ten students stated they did homework for the grades, to pass, and not fail. Two of the responses were the influences of parents and others encouraging and helping them to complete their homework. The last response was rewards because it motivates for a prize. Here it seems most of the students know the influence needs to come from an intrinsic motivation rather than extrinsic, the ultimate goal we strive for. If this is the case and students know this, then why is there still a large homework issue? When I asked them about extrinsic motivation, it was 50-50 with those who thought the extrinsic rewards would impact students to do their work. Those that did not think it would felt that, "no one really cares," "I do my work anyways," "people should want to do their work to get good grades." Reponses that favored extrinsic motivation stated, "lazy people actually did their work," "people wanted the reward," and "homework averages increased."

After learning of students thoughts on homework and motivation in general, I asked students how teachers, parents, peers, and themselves personally impacted their motivation. The following are student responses:

Teachers:

- They help me when needed
- They give projects and fun activities
- They give punishments for not doing your work
- They give encouragement/praise
- Use rewards and grades
- Talk to us about our future
- They care and want us to succeed

Parents:

- They help when needed
- Bribe with consequences
- Want me to succeed and encourage me
- Make you do it
- They check my book bag and planner to see if I have homework

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Peers:

- Encourages me to get my work done
- We work together
- They help me when I don't understand
- They would get mad at me when I didn't do the work
- No influence on me

Yourself:

- I do not want to get into trouble
- I want good grades
- I want a good job and future
- I make it a competition
- I want to be better than a family member
- Reminding myself that homework will help me succeed
- I want to play sports so I have to do good

The biggest influence of teachers, parents, and peers motivation among the interviewees was their availability for help and encouragement. It appears students need that reassurance and guidance from others to give them the confidence and push to accomplish something. However, for themselves, they strive to be a better person using individual motivation to be successful in their lives. They know that everyone is looking out for their best interest and they know they need education for the success in the real world, so if this is the case, why do they make the decision to not do their work? This thought still ponders me even after this study. Chapter 7: Discussion and Summary

IMPACT ON FUTURE PRACTICES

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I plan to continue to use rewards for motivation to increase completion of homework throughout the year. I think that even though it was not a huge success, there were students that benefited from the motivation and reward that I can continue to help in the future. I feel if this helps at least one student, then it has value and I will continue with it, maybe not as frequently but periodically. After comparing the two studies, the pizza party competition was more successful due to the peer motivation and the competitive nature of the students; hence I would like to do quarterly homework competitions and periodic rewards of candy throughout the year. I would like to give surveys at the beginning of the year to find out what interests and motivates students and try to use this information in the creation of my lessons and assignments. I can use student interests and motivations as means of differentiating inside and outside of the classroom. If I combine and implement all of the stated strategies into my classroom, I can only foresee homework completion to increase as the year progresses!

CONTINUING RESEARCH

With the continuous changing of society, it is important to keep with research that our students will benefit from. Through conducting my own research I would like to continue to research how to motivate students and in turn help with the homework issue.

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Homework and Student Motivation

CONCLUSION

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From researching prior studies to conducting and analyzing my own study, I have found that the key to student engagement and homework completion is through the use of motivation. Prior research found that extrinsic motivation has more negative results associated to it than positive. My first study that I conducted has similar findings. It found that there was not a significant correlation with the extrinsic reward of a candy bar with the increase in homework completion. In fact, more students decreased in homework completion than increased! However, the second study showed that through the extrinsic motivation of a pizza party, there was growth in homework completion over the time period. By the end of this study averages did go up overall and in turn, more work was being completed. So how is it that two similar studies yielded such opposite results? My prediction is the use of peer influence and competition as means of motivation. Students felt the second study was more interesting to them than a candy bar; hence I had achieved my goal of grabbing their interest and in turn motivating them. It is also true, as stated in previous studies, that peers have a bigger influence on students than most parents and teachers do. Students strive to fit in even if that means letting go of themselves and their educational values. As I found in the surveys and interviews from my second study, many students, especially the boys, have a very competitive nature among them. When given the chance to compete with their peers, they go all-out to win, even if that means actually doing their work! I was not surprised to find that very few students mentioned parents as means of motivation. With the society we live in today, family life and influence is slowing declining. It is important that as educators we realize this and remind ourselves that when we send work home, students may not have the home life that will enable them to complete the work successfully. Although, there are students out there who have the internal intrinsic motivation we strive for

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that allows for their success. Deep down, every student has to have some sort of personal intrinsic motivational influence that guides them when making that decision of whether or not to do their work. By the time students reach the eighth grade, they know right from wrong and should know that their education is key to a life full of choices and happiness.

I would conclude that extrinsic motivation mixed with peer motivation and competition was successful in my goal of increasing homework percentages. Extrinsic motivation alone is not enough to reach the results we need to assist the homework issue. Someday students will realize that everything we did to help them was only meant to give them a future of opportunities. I hope that when my students reach the real world, they think back to all we do as educators to get them where they are, and in turn intrinsically motivate themselves, the ultimate goal we hope students achieve by the end of their time with us.

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APPENDICES A:

Homework Survey #1 (Pre- study #1)

Please answer the following questions HONESTLY. Your answers will NOT affect your grade in any way. This survey is for Miss Kitchen's Graduate class Action Plan Research on homework.

1. What do you think about the amount of homework you have in math class? Is it fair? Explain.

2. Do you think math homework is necessary? Why do you think teachers give you homework?

3. Why do you choose not to complete your homework? (you can mark more than one response)

Not enough time to complete	
Too lazy	-
Don't care	
Are not able to do the work (learning problem)	
Too hard for you	
No one will help	
You have too much homework for other	
classes	
I always do my homework	
Other reason(s), please write:	

4. How often do you do your math homework in a week? Why?

5. How long do you work on your homework class (on average) outside of school? Check which best fits.

0-15 minutes/day	
16-30 minutes/day	
31-45 minutes/day	
46-60 minutes/day	
1 to 1 ½ hours/day	
Greater than 1 ½ hours/day	

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6. What would or does, motivate you to do your homework? Why does it motivate you?

7. Over the past few weeks what are your thoughts on homework that was given and the reasons for doing the homework?

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APPENDICES B:

Student responses to question number 3:

Table 1

Student Responses to Survey Question Three

Reasons	Number of students in the class who answered with this response
Not enough time to complete	5
Too lazy	7
Don't care	3
Are not able to do the work (learning disability)	2
Too hard for them	2
No one will help them on it	0
Too much homework in other classes	6
l always do my homework	6
Sports -tired	1
Forgot about it	1

APPENDICES C:

Study results table

Table 2

Study Results

STUDENT	PERCENT HOMEWORK PRIOR TO STUDY	PERCENT HOMEWORK POST STUDY	+ increased- decreaseds stayed same
Α	90%	50%	-
В	65%	12%	-
С	50%	50%	S
D	100%	80%	-
E	69%	72%	+
F	50%	92%	+
G	80%	100%	+
н	100%	100%	S
I	100%	71%	-
J	100%	100%	S
К	97%	100%	+
L	88%	37%	-
М	90%	96%	+
N	3%	0%	-
0	100%	100%	S

APPENDICES D:

Homework Survey #2 (Post – Study #1)

Please answer the following questions HONESTLY. Your answers will NOT affect your grade in any way. This survey is for Miss Kitchen's Graduate class Action Plan Research on homework.

1. Do you think homework helps you learn, or practice material learned from class?

Circle: YES NO UNSURE

During the past two weeks, has the reward of candy motivated you to do your homework?
Circle: YES NO Explain why or why not.

Do you think rewards are good motivational pieces to encourage homework completion?
Circle: YES NO Explain why or why not.

4 What advice or suggestions do you have to increase the homey

4. What advice or suggestions do you have to increase the homework completion issue in the future?

APPENDICES E:

Homework Pizza Party Competition Survey (Post-Study #2)

Please answer the following questions HONESTLY. Your answers will NOT affect your grade in any way. This survey is for Miss Kitchen's Graduate class Action Plan Research on homework.

1. Did the reward of a pizza party motivate you to complete your homework? Explain why or why not?

2. Did your peers motivate you to do your homework since the reward was class based? Explain why or why not?

3. Do you think the homework competition was beneficial to helping the homework issue (to encourage more homework completion)? Explain.

4. What advantages do you think the homework competition has (what did you like about it)?

5. What disadvantages do you think the homework competition has (what did you dislike about it)?

6. Do you think rewards are a good way to motivate students to complete their homework?

7. What would be the best way to motivate you to do your homework?

8. What suggestions do you have that would help encourage homework completion amongst students?

APPENDICES F:

Interview questions (Post-Study#2)

1. What comes to mind when you hear the word homework? Why?

2. What influences you most to do your homework? Why?

3. Did the rewards (extrinsic motivation) have a significant impact on your decision to complete your homework? Why?

4. Do you think the pizza party reward (extrinsic motivation) was successful to increase your class's homework completion? Why?

5. Explain how each of the following impacts your motivation: Teachers-

Parents/guardians-

Peers-

Yourself-

6. Can you think of any other type of motivational strategy you have had that was successful that I may not have thought of?

7. If you could re-do the pizza party study, what would you do differently and what would you keep the same to yield greater results?

APPENDICES G:

Pizza Party Competition Data Board

Table 3

Pizza Party Competition Data Board

	May	May	May	May	May	May	May	May	May	May	May	May	Total	Places
	13	14	15	16	19	20	21	22	27	28	29	30	percent	
	Tues	Wed	Thur	Fri	Mon	Tues	Wed	Thur	Tues	Wed	Thur	Fri		
Period 2	19	19	24	23	23	23	20	25	23	23	22	21	84.75%	1
(26)	73%	73%	92%	88%	88%	88%	77%	96%	88%	88%	85%	81%		
Period 4	10	13	14	15	6	18	17	19	8	16	14	19	70.42%	4
(20)	50%	65%	70%	75%	30%	90%	85%	95%	40%	80%	70%	95%		
Period 5	7	5	7	6	6	8	7	8	9	9	9	9	75.00%	3
(10)	70%	50%	70%	60%	60%	80%	70%	80%	90%	90%	90%	90%		
Period 6	3	3	3	3	3	7	6	8	5	7	8	9	60.17%	5
(9)	33%	33%	33%	33%	33%	78%	67%	89%	56%	78%	89%	100%		
Period 9	10	8	12	11	10	14	12	12	12	12	12	13	76.67%	2
(15)	67%	53%	80%	73%	67%	93%	80%	80%	80%	80%	80%	87%		

Note.

First/top number = number of students with complete homework that day

Second/bottom number = percentage of homework completion in the class

(#) = the number of students in the class

**May 23(Fri) and May 26 (Mon) there was no school due to Memorial Day

Ta	ble	4

Percent change

	Period 2	Period 4	Period 5	Period 6	Period 9
Percent change from May 13 to May 30	8% increase	45% increase	20% increase	67% increase	20% increase

APPENDICES H:

Graphs of Data Board

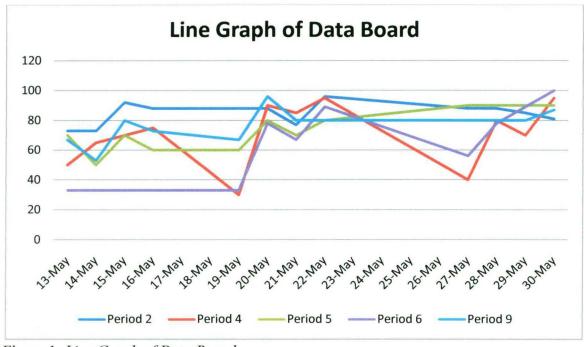


Figure 1. Line Graph of Data Board

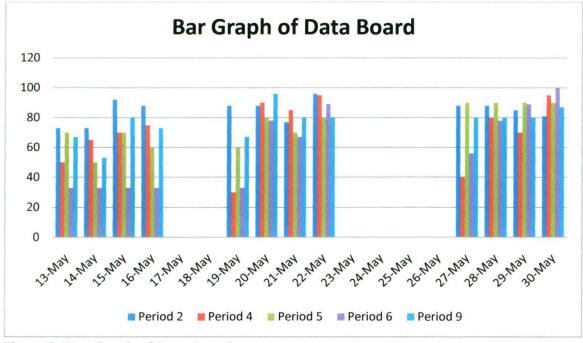


Figure 2. Bar Graph of Data Board

APPENDICES I:

All Classes Average

	May											
	13	14	15	16	19	20	21	22	27	28	29	30
	Tues	Wed	Thur	Fri	Mon	Tues	Wed	Thur	Tues	Wed	Thur	Fri
All Class Avg Per Day	58.6%	54.8%	69.0%	65.8%	55.6%	85.8%	75.8%	88.0%	70.8%	83.2%	82.8%	90.6%

Note.

Table 5

Week 1: May 13-16, highest percentage on Thursday and lowest percentage on Wednesday Week 2: May 19-22, highest percentage on Thursday and lowest percentage on Monday Week 3: May 27-30, highest percentage on Friday and lowest percentage on Tuesday 32% increase from May 13 to May 30



Figure 3. All Classes Average

APPENDICES J:

Pizza Party Competition Survey Results

Table 6Pizza Party Competition Survey Results

	Yes Responses	No Responses
Question 1	30/65 = 46%	35/65 = 54%
Question 2	30/65 = 46%	35/65 = 54%
Question 3	8/65 = 12%	57/65 = 88%
Question 4	N/A	N/A
Question 5	N/A	N/A
Question 6	10/65 = 15%	55/65 = 85%
Question 7	N/A	N/A
Question 8	N/A	N/A

Note.

Only 65 out of the 80 students completed surveys due to absences and choosing not to complete.

N/A - Not Applicable for yes or no responses