

The Effect of Reward Time on Classroom Behavior

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Submitted in Partial Fulfillment of the Requirements for the  
Degree of Master of Education

July 2009

Graduate Programs in Education

Goucher College

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## **Abstract**

This study was conducted by an Integrated Arts teacher to determine how best to maximize lesson time and successful learning and to minimize stress that stemmed from large class sizes and space constraints. The researcher wanted to test an intervention technique that rewarded students for positive behavior, similar to the point and reward system already in place, for certain second grade classes that were falling behind, both academically and behaviorally. The question at hand was ‘if smaller point goals are set for two second grade classes and more reward time is given when set goals are met, will time on task and classroom behavior improve?’ In order to answer this question, the researcher kept record of daily points and students’ grades earned during the experiment and compared them to the points and grades earned prior to the experiment. Classes that had smaller goals set for them and received immediate gratification with reward time were able to earn more points on a daily basis and improve the class’s average percentage grade.

# **CHAPTER I**

## **INTRODUCTION**

### **Overview**

Due to space limitations at the study school, the Integrated Arts teacher and Physical Education teacher must share the gym. Because each student in the school, Kindergarten through Fifth grade, has 45 minutes of Integrated Arts and 45 minutes of Physical Education a week, there is much overlap in the class scheduling. Due to this overlap, it is normal to see two classes, of about fifty (50) students, participating in a lesson at once. The constraints involved in sharing a small space make it impossible for one class to do an Integrated Arts lesson while the other class does a Physical Education lesson. To solve this problem, both classes participate in the same lesson. One of the times they visit the gym in a week the students participate in an Integrated Arts lesson, and the other day is a Physical Education lesson. The problem with this is that due to the large number of students in the gymnasium at once and the small size of the gymnasium, classroom management becomes more difficult and time on task suffers. First and foremost, it becomes challenging for the teachers to finish their lesson in one class period. In addition, there is often not enough equipment for such a large class size; as such, more injuries and student disagreements occur, and transitions take longer because of the large number of students.

### **Statement of Problem**

As an Integrated Arts teacher, the researcher attempted to address the problem of space constraints and the resulting problems and then come up with a solution or intervention. The purpose of the study was to determine how best to maximize lesson time and successful learning and to minimize stress that stemmed from a loud classroom and lack of classroom management.

## **Hypothesis**

The researcher set out to find out whether an intervention technique that rewarded students for positive behavior would improve the productivity of the class as a whole. While a point system and reward was already in place for students, certain classes were falling behind and not reaching their potential, both academically and behaviorally. To improve two specific classes' productivity, smaller goals would be set and larger rewards would be awarded. The classes would work to reach a certain amount of points in a week's time, and if they met their goal, they were rewarded with "free" time. Two other classes who were reaching their potential on a weekly basis remained on the track of the old point and reward system. The point system with smaller goals served as the independent variable while time on task and classroom behavior was the dependent variable. If smaller goals were set for two second grade classes and more reward time was given when set goals were met, then time on task and classroom behavior would improve.

## **Operational Definitions**

Throughout this report certain terms will be used, and in order to fully understand the participants and measures that were taken, those terms need to be explained. The two subject areas used throughout this report will be I.A. (Integrated Arts or Dance) and P.E. (Physical Education or Gym). Both classes, along with Art, Music, and Library, make up the "special area" classes at the study school. Each student in the school attends all five specials for 45 minutes per class each week.

For purposes of the actual experiment, the two second grade classes that make up the experimental group will be referred to as experimental class #1 and experimental class #2. The

two second grade classes that make up the control group will be referred to as control class #1 and control class #2.

## **CHAPTER II**

### **REVIEW OF THE LITERATURE**

This literature review sets out to discuss elementary school students' focus and attention and the impact of reward systems, classroom management techniques, and individual monitoring checklists on students. Section one provides the reader with an overview of focus and attention and the factors that contribute to students' inability to focus. Section two discusses the characteristics of students with focus/attention difficulties. Section three provides strategies for increasing focus and attention.

#### **Defining Focus/Attention**

The ability of students to focus and pay attention is becoming a large issue schools around the world are facing today. Students' inability to focus for long periods of time and sustain attention affects what they learn as well as the effectiveness of teachers' instruction. Traditionally, educators have grouped paying attention with stillness, and many times this expectation of our students is too high (Carson, Shih, & Langer, 2001). Many students, affected by outside factors that will be later discussed, cannot sit still for extended periods of time, but that does not mean that they are not focusing or paying attention.

Students demonstrating attentive behavior look at the teacher when he or she is speaking, attempt the assigned task, seek assistance from the teacher, and follow directions (Stahr, Cushing, Lane, & Fox, 2006). Attentive behavior is not defined by sitting still. Many students can focus and complete an assigned task without sitting in their desks; in fact, some students may even need to walk around occasionally for a small break. Stahr et al. define inattentive behavior as student behaviors or sounds that interfere with learning or interrupt the flow of the teacher's instructions. According to Stahr et al.,

Specific examples of off-task behavior include repetitive pencil tapping, head or leg shaking, and fidgeting; drawing on oneself or materials; talking out; gazing around class; leaving the assigned instructional area; making audible vocalizations (e.g., singing, humming, or talking back); and not following directions. (p. 203)

Many factors contribute to students' inability to pay attention, including ADHD, other behavioral disorders, and the lack of recess and free time for students to be "kids". Students struggle to sit still for long periods of time, and research has been conducted to test the hypothesis that movement actually encourages the use of different aspects of the stimulus thereby increasing attention. Varying one's perspective and moving around space can actually enhance one's memory for both the individual parts of the stimulus in addition to the "big picture," (p. 210), according to Carson et al. (2001).

Holmes, Pellegrini, and Schmidt (2005) argue that students have greater success following directions after recess time, pointing out that, "Children of all ages, like adults, typically enjoy taking breaks in the course of a demanding school, and work, day," (p.735). It is important for children to have a time in their day where they can engage in unstructured physical activity and conversations with their peers. This time needs to be free of adult intervention and instructions. Despite the research that children are more attentive after breaks than before, however, "there is a movement across the USA and in the UK to eliminate and reduce the recess period across the school years, from preschool through middle school," (Ibid, p. 736). Citing reasons such as the need for time to meet instructional goals and outcomes, bullying that may occur during recess, and the time it takes for students to regain focus on their schoolwork, some officials contend that recess should be eliminated. However, if students are not given time to think freely—time when they are not being held responsible for learning and focusing—can we really expect them to be able to focus and pay attention during instructional time in the classroom?

According to the cognitive immaturity theory, younger children benefit from recess regimens. About young children, Holmes et al. (2005) conclude in their study that the

...immaturity of their nervous systems and lack of experiences render them unable to perform higher-level cognitive tasks with the same efficiency as older children as adults, and this directly influences their educability. As a result, young children are especially susceptible to the effect of interference and should experience the greatest gains from breaks (which recess provides) between focused intellectual activities. (p.737)

### **Characteristics of Students with Focus/Attention Difficulties**

One of the primary factors affecting students' ability to focus/pay attention is ADHD.

Students diagnosed with ADHD can often contribute to disruptions in the classroom and instructional time loss for other students. According to Stahr et al. (2006),

Students with attention-deficit/hyperactivity disorder exhibit problems with impulsivity, sustained attention, and over-activity. These behavior patterns are manifested in classrooms as difficulty in attending to and following instructions, completing instructional activities, and complying with classroom rules. (p.201)

An intervention program sustained by attention (positive reinforcement) and escape (negative reinforcement), might minimize these behaviors and create a more efficient, worthwhile classroom experience for all.

Large classroom populations and the teacher's difficulty in handling such a large number of students can also contribute to students' off-task behavior. A teacher dealing with classroom management in a small, 20-student class uses different strategies than he/she would use in a classroom of 45-50 students. In fact, as Haydon and Scott (2008) suggest, "Managing a large number of children in one setting can be stressful and present a great challenge....When the ratio of children to adults is larger, there is potential for disruptive behavior" (p.283).

A teacher must be prepared with a clear set of expectations as well as able to provide encouragement to ensure student success and gain students' trust. If a teacher does not perform these critical tasks, students have the ability to get off task very easily. To elicit the greatest

potential from his or her students, a teacher must have clear transitions and a “fool-proof” lesson, as well.

### **Strategies for Increasing Focus/Attention**

There are many different strategies for increasing focus/attention in students in various situations. For students with ADHD, teachers have many options at their disposal to maximize students’ potential and focus/attention in the classroom. One possible solution is a teacher-administered checklist, rating a student’s inattention in the classroom. This checklist is used “to assess the extent to which the student does not inhibit responses to distracters,” (Papadopoulos, Das, Koder, & Solomon, 2002, p. 16) and can include questions such as,

1. Does child accurately heed directions?
2. Does child daydream in class?
3. Does child have trouble concentrating?
4. Is child able to concentrate on a task until completed?
5. Does child listen attentively?
6. Does child disregard some or all directions? (Ibid p. 21)

Sometimes it can be more effective to provide a self-monitoring checklist for a student to fill out so that student then monitors his/her own behavior on a fixed-interval schedule. This gives the student responsibility and ownership over his/her actions. Another idea is to place colored cards on a student’s desk signaling the level of support he/she needs to complete an assignment. As an example, Stahr et al. (2006) explain that

A green card can indicate that a child is able to work independently and does not need assistance with the task...a yellow card indicates that a child is attempting the assignment but would likely need assistance shortly. The yellow card can also signal that the child is beginning to feel anxious but is able to wait for teacher assistance. The teacher or paraeducator can then respond to a child within 5 minutes when the yellow card was displayed. A red card indicates that a child needs immediate assistance and is feeling either anxious or angry. (p. 206)

Providing a student with a color code system eliminates constant disruptions on the student’s part when he/she is requesting the teacher’s attention. This way the teacher can get

other students started on an activity, and then assist the student if he or she needs it. This technique also allows the students to become more independent, eliminating unnecessary visits from the teacher.

In a larger classroom setting, creating smooth transitions as well as procedures for entering and leaving the classroom and leaving for the restroom can eliminate time for students to become off task and out of control. To ensure maximum focus and attention in a larger classroom setting, Haydon and Scott (2008) suggest certain steps for developing an effective instructional setting. These methods include identifying situations where problem behavior most likely occurs, adjusting the environment for maximum success, practicing the expected behaviors, acknowledging the expected behaviors when they occur, reminding students of the expected behaviors, and observing the effects of the strategies.

Another strategy for keeping students focused is for teachers to remain mindful of student intelligences and then employ students' strengths in their diverse areas in the classroom. Unfortunately, when students find that their primary intelligences are not those same intelligences that are valued in traditional school settings, such as linguistic, logical, and mathematical, they feel less capable of completing tasks (Schirduan & Case, 2004). Therefore, it is critical for teachers to vary the curriculum to allow students to feel strong in different classroom settings. Tapping into students' strengths not only helps students to succeed in their education, but it also helps them to further their ideas and passions for life goals and careers. "The most important moment in a child's education is the crystallizing experience: when the child connects to something that engages curiosity and stimulates further exploration," (Ibid, p. 94).

## Classroom Management Strategies

In order to ensure maximum attention and focus in a classroom, a teacher must implement proper classroom management and discipline. This reduces teachers' stress and also maximizes students' potential. According to Gordon (2001), classroom discipline and management can be a particularly difficult challenge for new teachers. In a larger movement-based classroom, such as an Integrated Arts or Physical Education setting, much of the class work is group-oriented, and a grade is given based on the product that the group produces. Because students are working at different paces in a cooperative fashion and are moving constantly, classroom management can be a struggle. It is important for a teacher in such a situation to have smooth transitions, clear instruction, and even clearer expectations to remove any risk of injury and misbehavior.

If classroom management and discipline are not in place, learning cannot occur. In an idea similar to that of Maslow's hierarchy of needs, Gordon (2001) claims that students' primary needs must be met first so that students feel comfortable being themselves in the classroom. According to Gordon, in order for one to reach the self-actualization phase where he/she reaches his/her full potential, a student must feel physiological satisfaction, safety, nurture, and a sense of personal value. As Gordon states, "Students who are cared for can more easily assimilate caring qualities, which fuel their own capabilities to build self-esteem and confidence," (p. 19).

According to Woods and Erwin (2008), a B.E.H.A.V.I.O.R. model that is implemented all year round can maximize the level of activity, and the time dedicated to learning in a Physical Education classroom. Setting up **beginning of the year procedures** (B) that define rules for entering and exiting the gym, handing out equipment, forming groups, and transitions can make the time in the classroom more efficient. Next, creating a friendly, inviting **environment** (E),

eliminating **hazards** (H) in the classroom, and finding ways to efficiently take **attendance** (A) are key components. Additionally, encouraging and supporting the **value** (V) of the subject area, creating **instant** (I) **activities** to immediately engage students in a skill practice or physical activity, **organizing** (O) students in the most time efficient way, and finally giving **responsibility** (R) to the students to solve their peer issues and problems can encourage improvement and add new ideas to be implement into a classroom based on physical activity and movement (Gordon, 2001).

In their study, Desiderio and Mullennix (2005) review an Assertive Discipline program that a student teacher implemented and found that after implementation of the program, students responded both to the student teacher and to their regular classroom teacher in more appropriate ways. This program emphasized “positive reinforcement as the key to students making appropriate choices regarding classroom management,” (Ibid, p. 383). The Assertive Discipline program included basic rules, a step-by-step discipline procedure, reward systems (for both the individual students and the entire class), and class procedures. Reflecting on the Assertive Discipline program and on her students, the student teacher (Katherine) stated

The kids absolutely loved it and they had a remarkable understanding when they didn’t earn their points. I told them that is wasn’t a matter of me not giving them the points, but a matter of them not earning them that day. As soon as I said that, they (the students) were fine with it. They knew that there was no argument because I put the power in their hands, and they either made good decisions or poor ones. They knew I would not talk about it the next day or hold it over their heads. (Ibid)

By giving students a small amount of responsibility and holding them accountable for their actions, teachers can provide a major learning and growing opportunity for them. A teacher who is willing to prepare, enforce, and stand by his/her discipline program consistently will most likely be rewarded with students who adapt and respond appropriately.

## **Summary**

By understanding students who struggle with focus and attention and knowing what is considered attentive versus inattentive behavior, teachers can more easily understand why students have trouble focusing and paying attention. Whether the lack of focus and inattention is based on a student diagnosis of ADHD, the lack of recess, or the large size of the classroom, teachers must understand why their students act the way they do. By providing themselves with multiple strategies for increasing focus and attention and having many classroom management techniques, teachers can elicit the maximum success from their students and provide them with the healthiest and safest possible learning environments. Each classroom management strategy provides different perspectives for teachers to deal with different types of students to ensure that each student reaches his/her maximum potential in the classroom.

## **CHAPTER III**

### **METHODS**

#### **Design**

This study used an experimental design and contained all the elements of a traditional experimental design, including an experimental group, a control group, a problem, and a treatment. In the Integrated Arts classroom, two specific second grade classes struggle to keep up with their peers when earning points for appropriate classroom behavior. Due to lack of attentiveness, outbursts, interruptions, and an unwillingness to cooperate, much of these students' class time is wasted with discipline not necessary in other classes. To attempt to decrease off-task behaviors of the students in two specific second grade classes, the classes were given smaller goals to achieve. The idea behind the study was that a smaller goal with a more immediate reward might better motivate the students to remain on task throughout lessons.

The control group followed the same reward system outlined at the beginning of the year for all classes. That system rewards classes once they have accrued seventy-five total points. Students are rewarded with 10 minutes of free time in the class period immediately following their accomplishment. In this 10 minutes, the students vote on their desired activity, where majority rules. Students may choose to play tag games, scooter basketball, or games from previous lessons.

In order to gain a more positive attitude from the experimental group, they were given a smaller, short-term goal. In a week's time they could earn a total of twelve points (3 each class period). Every time they accrued ten points, regardless of how long it took them, they were given five minutes of free time at the end of the next I.A. class. In those five minutes, they voted on an activity, following the same criteria as the control group.

Students in both the control and experimental groups received a pre-test. Their points from the previous marking period were recorded and used to develop the need for an intervention. The students in the experimental group received a treatment, and points continued to be recorded.

### **Subjects (or Participants)**

At the school where the experiment took place, students are provided with a quality movement experience for 45 minutes twice a week. One of those class periods is devoted to the Integrated Arts curriculum, and the other 45 minutes is taught by the Physical Education teacher and is devoted to the Physical Education curriculum. The goal for movement educators is to develop and enhance students' gross motor skills, kinesthetic awareness, and cultural awareness, as well as provide opportunities for students to develop, maintain, or enhance their fitness/activity levels.

In 2008 the research school had five hundred fifty-three (553) students enrolled. Of those five hundred fifty-three (553) students, five hundred thirty-three (533) were White, one (1) was American Indian, twelve (12) were African American, four (4) were Asian/Pacific Islander, and three (3) were Hispanic. The number of males enrolled was two hundred ninety-seven (297), and the number of females was two hundred fifty-six (256). Eleven percent (11%) of students received Free/Reduced Meals. Each grade level (Kindergarten through fifth grade) has four classes, with each class averaging 22 students. In addition to the classroom teacher, each Kindergarten classroom has a para-professional, and each grade level has a special education teacher who rotates from classroom to classroom.

The subjects chosen for participation in this study were the students in four, second grade classes from a rural elementary school. Two classes made up the experimental group, and the

control group was comprised of two classes. The classes that were chosen for the experimental group, experimental class #1 and #2, were selected because both classes often receive only one or two “fishgrams” (sometimes even 0) when they come to I.A. and P.E. They fall behind other classes, and they usually reach their goal weeks after other classes have. The two classes that stayed on par with points, control class #1 and #2, served as the control group. These classes often receive all three possible points in class. They finish more activities in the classroom, tend to have fewer outbursts, and complete tasks much quicker than the experimental group’s classes. The experimental group consisted of 47-second graders, 20 boys and 27 girls. The control group consisted of 44-second graders, 21 boys and 23 girls.

### **Instrument**

The researcher developed the instrument used for this study. Each day the classes’ points were recorded on a spreadsheet. The spreadsheet was broken down by date and class as well as which specific points were earned that day. If students earned their entering and exiting point that day but did not earn a listening point, this was noted, for example. When the experimental group earned ten points, a line was drawn, and a new tabulation of points began. The control group’s points were kept on an identical spreadsheet.

### **Procedure**

In order to fully understand the Integrated Arts and Physical Education program and how the classroom is run, some background information is necessary. This information is provided below.

Integrated Arts (I.A.) or Dance is a program unique to the Cecil County Public School system. The I.A. program is only in its third year, and with each year comes more development and progress in the program. At this point in time I.A. has only been implemented in Cecil

County's 17 elementary schools, but the goal is that in the next few years this program will continue to expand. The mission of I.A. is to

combine curricular components in dance, physical education and theatre to create a comprehensive physical and fine arts program. The program will integrate instructions in these disciplines with core subject areas to address every child's learning style. Ultimately dance, physical education and theatre specialists will work collaboratively with classroom teachers to provide this integrated approach. Current research shows the significance of the inclusion of fine arts and kinesthetic instructional strategies to ensure the success of all students. (Cecil County Public Schools, 2007)

Due to space limitations, the P.E. teacher and the I.A. teacher have to share the gymnasium. Because of this, it is normal to see two classes, of about fifty (50) students participating in the same lesson at once. Each class visits the gymnasium two times per week, once for an I.A. lesson and once for a P.E. lesson. Due to the large number of students in the gymnasium at once and the small size of the gymnasium, classroom management becomes more difficult and time on task suffers. During an I.A. lesson the I.A. teacher serves as the main instructor, while the P.E. teacher helps with classroom management and "crowd control" and vice versa during a P.E. lesson.

Every time a class comes to the gym, that class is working to earn points or "fishgrams." The class receives one point for entering the classroom quietly and taking their seats, one for listening and following directions, and one for lining up quietly. These points are awarded at the end of the 45-minute class period, and each teacher is given a fish with the amount of points his/her class received written on it. Each teacher hangs his/her classes' "fishgrams" on the wall outside of his/her classroom for other classes to see where they stand and how close they are to their goal. The amount of points each class earns is also recorded in the gym on a white board.

Each marking period a new goal is set for students. In the first marking period, students' goal was 65 points; the second marking period was 70 points, and the third marking period was

75 points. When the classes received 75 points, they voted on which activity they wanted to do for their reward (the two classes that come to the gym together combined their points to reach a total of 75). They were rewarded with their free time in the last ten minutes of their next I.A. or P.E. class period. This system served to motivate students and the classes to be on their best behavior. Classes strived to be first to reach 75 points and wanted to get the most points possible to impress their teachers. The idea of rewarding classes with “fishgrams” came from the school’s newly implemented “Fish Philosophy” program that was introduced to teachers at the beginning of the year to implement into their everyday teaching.

The first step to prepare the researcher for the experiment was to take record of the points and grades earned by both the experimental and control groups from the marking period prior to the beginning of the experiment. This data was used after the experiment was complete as a source of comparison to see how successful the experiment was. The next step was to inform the participants of the experiment. The students in the experimental group discussed their progress thus far, as far as their points were concerned, and how it seemed to be more difficult for them to earn points on a daily basis. They agreed with this statement and because of that they were informed that they would compose the experimental group of the study. A smaller goal would be set for them and when they reached 10 points, they would receive a five-minute reward time. The control group was not informed of the experiment and continued as usual with the normal point system. Nothing in the daily class routine changed for the control group.

The control and experimental groups were easily formed, based solely on homeroom teacher designations. It became obvious that the two second grade classes that tended to fall behind in their points needed an incentive to improve their behavior, so they formed the

experimental group. The two second grade classes that were better able to keep on average with other classes from other grade levels formed the control group.

## CHAPTER IV

### RESULTS

This study was conducted to answer the researcher's question "If smaller point goals are set for two second grade classes and more reward time is given when set goals are met, will time on task and classroom behavior improve?" The researcher measured time on task by looking at how many "fishgrams" the classes earned at the end of each class period in addition to students' final grades for the third marking period, the marking period after the experiment was complete. These figures were compared with points earned pre-experiment and grades from the 2<sup>nd</sup> marking period.

A look at the experimental group in the study, the two classes that had smaller goals to achieve, reveals that the students improved in both their daily class points earned as well as in their end of marking period percentage grade. Prior to the intervention, the experimental group earned a low number of points on a daily basis, producing a low weekly average and not allowing them to reach their pre-determined goal. Pre-experiment, the average score of "fishgrams" for the experimental group in six week's time was 1.67 points per class period (see table 1). This was compared to the control group's pre-experiment "fishgrams" earning 2.5 points per class period (see table 2). (Note: Each class visits the gym two times per week. In the following tables, the first number under each week represents the points awarded for the class's first visit; the second number, the second visit.)

**Table 1 “Fishgrams” Earned Before Experiment-Experimental Group**

<b>Teacher</b>	<b>Week 1</b>	<b>Week 2</b>	<b>Week 3</b>	<b>Week 4</b>	<b>Week 5</b>	<b>Week 6</b>	<b>Total</b>
<b>Experimental Class #1</b>	2 0	2 3	1 3	1 1	2 2	2 2	n/a
<b>Experimental Class #2</b>	2 0	1 1	2 3	0 2	1 3	2 2	n/a
<b>Average</b>	1	1.75	2.25	1	2	2	1.67

**Table 2 “Fishgrams” Earned Before Experiment-Control Group**

<b>Teacher</b>	<b>Week 1</b>	<b>Week 2</b>	<b>Week 3</b>	<b>Week 4</b>	<b>Week 5</b>	<b>Week 6</b>	<b>Total</b>
<b>Control Class #1</b>	3 2	3 3	3 3	1 3	3 2	1 3	n/a
<b>Control Class #2</b>	3 2	3 3	2 3	1 2	3 3	2 3	n/a
<b>Average</b>	2.5	3	2.75	1.75	2.75	2.25	2.5

During the experiment, points continued to be recorded for both the experimental and control group. The experimental group began to earn more points on a daily basis, helping them to reach their smaller set goal faster, therefore receiving more free time. The experimental group went from receiving a 1.67 average daily total to receiving a 2.33 average daily total (see table 3).

**Table 3 “Fishgrams” Earned During Experiment-Experimental Group**

<b>Teacher</b>	<b>Week 1</b>	<b>Week 2</b>	<b>Week 3</b>	<b>Week 4</b>	<b>Week 5</b>	<b>Week 6</b>	<b>Total</b>
<b>Experimental Class #1</b>	3 2	3 2	1 3	2 2	3 2	3 3	n/a
<b>Experimental Class #2</b>	3 2	2 2	2 1	2 3	3 2	3 3	n/a
<b>Average</b>	2.5	2.25	1.75	2.25	2.25	3	2.33

This average put the experimental group almost on par with the control group. Although during the intervention the control group received a 2.58 daily total, the experimental group greatly improved their performance, putting all four second grade classes on an equal playing field. In terms of “fishgrams,” students in the experimental group reacted positively to smaller goals set for them. On average the classes in the experimental group reached their goal of ten points in one week’s time.

The control group in this study continued to earn adequate points each class period to lead them to their set goal on pace with other classes in the school; in addition, the control group continued to complete full lessons. Although the control group was not involved in the intervention, their average daily total went from a 2.5, pre-experiment, to a 2.58 post-experiment (see table 4).

**Table 4 “Fishgrams” Earned During Experiment-Control Group**

<b>Teacher</b>	<b>Week 1</b>	<b>Week 2</b>	<b>Week 3</b>	<b>Week 4</b>	<b>Week 5</b>	<b>Week 6</b>	<b>Total</b>
<b>Control Class #1</b>	2 3	3 3	3 2	3 2	3 2	2 3	n/a
<b>Control Class #2</b>	2 3	3 3	3 2	3 2	3 2	2 3	n/a
<b>Average</b>	2.5	3	2.5	2.5	2.5	2.5	2.58

In addition to keeping daily point totals, the researcher kept record of all students’ daily grades and end of marking period averages, both before and during the experiment. In general class averages in the experimental group improved from pre-experiment to post-experiment. Before the intervention, “Experimental Class Number One” had a G.P.A. of 91.79%; after the intervention the G.P.A. rose to 93.97%, an increase of 2%. “Experimental Class Number Two” earned a G.P.A. of 92.05%; after the intervention, the average G.P.A. was 92.99%, an increase of

.94%. While the class average was an “A” before the experiment, students still improved their academic performance as a whole (see table 5).

**Table 5 Grade % Average-Experimental Group**

<b>Teacher</b>	<b>Pre-Experiment Average</b>	<b>Post-Experiment Average</b>	<b>Difference</b>
<b>Experimental Class #1</b>	<b>91.79</b>	<b>93.97</b>	<b>&gt; 2%</b>
<b>Experimental Class #2</b>	<b>92.05</b>	<b>92.99</b>	<b>&gt;.94%</b>

In addition, even though the control group had no change in behavior or routine, they, too, saw an increase in academic performance, increasing their G.P.A. by .96% and 1.61%, respectively (see table 6).

**Table 6 Grade % Average-Control Group**

<b>Teacher</b>	<b>Pre-Control Average</b>	<b>Post-Control Average</b>	<b>Difference</b>
<b>Control Class #1</b>	<b>93.13</b>	<b>94.09</b>	<b>&gt; .96%</b>
<b>Control Class #2</b>	<b>92.45</b>	<b>94.06</b>	<b>&gt;1.61%</b>

During the experiment the researcher found that using the students' five minutes of reward time served as a highly motivational technique throughout the process. Students in the experimental group worked extra hard in order to receive their reward time sooner. By looking at the class points and individual grades, the researcher was able to determine whether or not the experimental group improved their classroom behavior, on-task time, and achievement.

Post experiment, the classes in the experimental group continued to work toward their smaller goal of ten points per week, while the classes in the control group continued to reach their goal of 80 points, the same goal that was set for the remainder of the school. Students from the experimental group continued to react positively to the set goal and on average continued to reach ten points in a week's time and continued to succeed academically.

## **CHAPTER V**

### **DISCUSSION**

The researcher set out to determine whether or not an intervention that rewarded points for good behavior would positively affect two second grade classes' behavior as well as the classes' productivity as a whole. The hypothesis stated "If smaller goals are set for two second grade classes and more reward time is given when set goals are met, will time on task and classroom behavior improve?" The results of this experiment supported the original hypothesis, and the two classes that had set smaller goals and were awarded more reward time not only improved their points earned and time on task but also improved their academic achievement in the class.

#### **Implications of Results**

From this study it is reasonable to assume that for some classes, smaller goals yield better results. Some classes/students are unable to look at the bigger goal that is set for them in the future. This may be due to immaturity of students and the need to receive instant gratification. Students may be better able to control their behavior and stay on task when they know they will be rewarded with free time within a week's time versus having to wait until the end of a nine week marking period. As students get older they may react more positively to larger goals rewarded in the future.

#### **Threats to Validity**

While it can be deduced by the researcher that students improved their behavior, time on task, and academic achievement with a smaller goal, there are some threats to the validity of this study. During the third marking period, when this experiment was conducted, students went on a spring holiday mid way through the experiment. A break from school may have contributed to

students' improvement in behavior and higher points earned because students had an opportunity to release some of their energy at home when school was out of session. On the contrary, the excitement of Winter Break and the holiday season during the second marking period, before the experiment was conducted, may have contributed to the students being off task and less well-behaved.

Another factor that could have affected the improvement of the classes' behavior during the experiment may have been attributable to a specific student's behaviors. One student in a class has the ability to impact the behavior of the whole class, both positively and negatively. If a student had a change in a medication, a change in his/her home life, or a change in maturity, his/her actions could have affected what happened to the class as a whole.

### **Connections to Previous Research**

The classroom challenges inherent in this study, including overactive students, limited time-on-task, and poor behavior, are characteristics of any classroom environment and are common struggles for all teachers. Previous research (Woods & Erwin, 2008) shows that it is important for a teacher to establish a strong classroom environment from the first day of school and not only to set clear expectations of good behavior and consequences for poor behavior but also to provide smooth transitions and clear instruction. This maximizes the success of the classroom.

A basic point system or self-monitoring checklist can be used to motivate students to take responsibility for their actions. Students can be rewarded for good behavior with points or have their behavior monitored with colored cards (green, yellow, and red). Similar rewards can be used for not only good behavior but also when a student finishes classwork/homework on time, works well in a group with other classmates, or earns a compliment from another teacher.

Reward time can be given in all classrooms settings, whether a teacher rewards her students with time to play games with classmates, extra recess, or homework passes. In elementary school, students typically want to impress their teachers by doing well and succeeding with a task. Rewards reinforce this behavior and make the classroom a more pleasant, less-stressful, and more productive environment for both teacher and student.

### **Implications for Future Research**

Since conducting this experiment, the researcher has gained a clearer understanding of the different needs different classes at the same school can demand. There may not be one point system and one reward system that works for every class of students. Different classes may require different goals and rules to be set, depending on what they are capable of on a developmental level. There may be specific classroom management strategies that work for some classes and fail for others.

In the future the researcher may decide to design her classroom differently by developing a different point system for different classes. One example of a change could be that different goals are set depending on the ages of the students. Classes in which students need more immediate gratification, possibly all Kindergarten, First, and Second grade classes, could follow the point system, earning them reward time on a weekly basis. Students with a higher maturity level, for example those in Third, Fourth, and Fifth grade classes, might be able to work toward a longer-term goal that is set for them, rewarding them on a monthly or quarterly basis.

A future study could also reward points to individual students. Based on each class period, a student could earn up to three points, for how well he/she entered and exited the classroom as well as listened to directions. Awarding each child with individual points would hold each student accountable for his/her actions and would eliminate students with extraneous

factors from influencing the class's behavior. Students would then be awarded individually when they reached their individual goals.

In general, this experiment helped the researcher to develop a fairly successful outline of a simple intervention strategy. With simple modifications this strategy could be used for a variety of different students in a variety of environments. In the future when classroom management becomes difficult, time on task decreases, and students begin earning lower grades, the researcher is now informed of a successful intervention, one that has demonstrated positive results for one specific classroom environment.

## REFERENCES

- Carson, S., Shih, M., & Langer, E. (2001). Sit still and pay attention? *Journal of Adult Development, 8*(3), 183.
- Desiderio, M., & Mullennix, C. (2005). Two behavior management systems, one classroom: Can elementary students adapt? *The Education Forum, 69*(4), 383-391.
- Gordon, D. (2001). Classroom management. *Music Educators Journal, 88*(2), 17.
- Haydon, T., & Scott, T. (2008). Using common sense in common settings: Active supervision and pre-correction in the morning gym. *Intervention in School & Clinic, 43*(5), 283-290.
- Holmes, R., Pellegrini, A., & Schmidt, S. (2005). The effects of different recess timing regimens on preschoolers' classroom attention. *Early Child Development & Care, 176*(7), 735-743.
- Papadopoulos, T., Das, J, Koder, H., & Solomon, V. (2002). Assessment of attention in school children: Teachers' ratings related to tests of attention. *European Journal of Special Needs Education, 17*(1), 15-32.
- Schirduan, V., & Case, K. (2004). Mindful curriculum leadership for students with Attention Deficit Hyperactivity Disorder: Leading in elementary schools by using Multiple Intelligences Theory (SUMIT). *Teachers College Record, 106*(1), 87-95.
- Stahr, B., Cushing, D., Lane, K., & Fox, J. (2006). Efficacy of a function-based intervention in decreasing off-task behavior exhibited by a student with ADHD. *Journal of Positive Behavior Interventions, 8*(4), 201-211.

Woods, M., & Erwin, H. (2008). Using good B.E.H.A.V.I.O.R. to improve the learning environment. *Journal of Physical Education, Recreation & Dance*, 79(4), 14-16.