Extrinsic/intrinsic motivational study

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EXTRINSIC/INTRINSIC MOTIVATIONAL STUDY

Steven R. Howard

A Master’s Thesis

Submitted in partial fulfillment of the requirement of the Master of Arts Degree in The Graduate School of Rowan University

4/10/02

Approved by ____________________________

Date Approved ________/______/______
The purpose of the study is to understand how extrinsic/intrinsic motivation will encourage student learning in a sixth grade learning setting. The drawing population was approximately 157 students. The sample of the study consisted of 43 sixth graders. The students were given pre-assessment and post assessment surveys to answer. The pre-assessment survey was given in October and the post assessment was given in February. The study consisted of control and experimental groups. Twenty-one students were in the experimental group and twenty-two in the control group. The experimental group received the four-phase study. During the pre-assessment phase, the students’ responses in the experimental group fluctuated between 1.1 and 1.85. The students’ responses in the control group fluctuated between 1.3 and 1.7, but the majority of the responses were above average intrinsically. The fact that the students were already intrinsically motivated raises question to the validity of the research study.
Mini-Abstract

Steven R. Howard  
Extrinsic/Intrinsic Motivational Study  
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Educational Leadership

The purpose of the study is to understand how extrinsic/intrinsic motivation will encourage student learning in the sixth grade setting. From the data gathered in the study and from the statistical analysis performed, it could be said that there were differences between the students in the control and experimental groups. The statistical analysis of the study was skewed by inadequate sampling measures. The population of the research study was too small.
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Chapter 1

Introduction

It is alarming to see how the American public is responding to the many dysfunctional acts occurring in schools across the United States. Many individuals attribute the adverse disruptions to an ever-changing society and a deterioration of family values. More and more, we are seeing the need for children to develop a set of internal values that will guide and shape them for the rest of their lives. The implementation of positive discipline and structural frameworks into the learning curriculum is becoming more evident everyday.

Character traits are becoming increasingly popular topics in the public schools. News reports of increased violent juvenile acts, teen pregnancy, drug use and distribution and suicide cause many to declare a moral crisis in America.

While not all of these social concerns are moral in nature, most have diverse and complex origins. The purpose of implementing the token economy is to shape behavior.

The token economy will help students become intrinsically motivated. Also, it will facilitate students in achieving desired goals by developing responsibility traits through extrinsic parameters. The students will internalize the concept of responsibility and use it to facilitate the process of making decisions. For example, the students will know when they are suppose to raise their hands and when they can talk freely. The token economy will last approximately three months. The rewarding process will diminish as time progresses. The ultimate goal is to eventually get students to work without rewards.
The family structure and cohesiveness are very important in shaping the character of a child. The schools cannot fully mend or heal extremely turbulent domestic situations. It is undeniable that schools have a major impact on the social development of a child. Schools can do a tremendous amount to build good character in young individuals.

**Why have I chosen to use a Token Economy?** I have been in education for five years. My primary discipline is middle level education. Throughout my many instructional endeavors, I have experimented with many different techniques of shaping behavior. I am constantly experimenting with innovative ideas in hopes to affect children positively.

When I tell people that I am a middle school teacher, they practically cringe. I hear comments such as, "How do you deal with those kids!" or "The children these days are so fresh!" Many individuals outside of the educational parameters have similar beliefs. They feel the educational institutions are failing the children of America. That is certainly a debatable issue. But, everyday instructors are working diligently to mold and shape children in productive ways. Yes, it can get frustrating at times, but the end results are extremely gratifying.
I feel the instructional answer to many of the concerns with classroom leadership is organizational structure. Many students strive for organization and structure. By incorporating a token economy plan into the daily routine, students can efficiently record results and jot down assignments. (Lyons, 1997) Many students want to know what is expected of them. This helps them develop a comfort zone. The token economy not only creates this zone, but also allows for expansion beyond the classroom. The design of the token economy is shaped around real world aspects. For example, people work to get paid. I am not saying in doing so they don’t feel good, but ultimately money is the issue. If they didn’t get paid for their service, they probably wouldn’t work. They are working for an extrinsic reward, money. The design and development of the token economy would replicate of a capitalistic society.

a. Focus of Study

The focus of this particular study is to develop and shape character through a token economy. The basis of the instructional plan will be structured around extrinsic rewards and external motivating factors. The program will be developed for a sixth grade class at the Jordan Road School in Somers Point, New Jersey. The class is racially and instructionally diverse with 24 students. The gender make-up is 11 girls and 13 boys. Mr. Ragan is the teacher involved in the study. He teaches seventh grade in the Somers Point School District. Mr. Ragan has minimal knowledge concerning alternative discipline based around a token economy system. Mr. Ragan has been teaching for two years.
GRAND TOUR QUESTION:
Will the token economy build character?

SUBQUESTIONS:
How will the plan make classroom instruction more effective?
What conceptual and educational values will the students gain?
How will the disciplinary plan encourage social and educational awareness?
How will the plan prepare the students for junior high?

The first parameter the instructor must be concerned with is why certain actions occur. For example, was the lesson boring or not interesting? And, what methods can I take to gain the student interest? The reason why I chose the token economy is because I feel it will promote student interest and ultimately keep the students on-task. The token economy will hopefully condition behavior for the future. The students will be conditioned to working independently and interact together appropriately.

The token economy must match the personal desires of the student population. In addition, the students should be conditioned to follow instructional guidelines in order to earn token money. This approach will help the students understand what is expected of them and how to achieve desired results. The instructor’s role in the study is to use a reward system as a behavior modification strategy.
Also, the instructor will encourage the development of social skills through direct instruction, modeling and action oriented consequences. And lastly, the instructor will use an extrinsic motivation plan as an initial strategy to move towards intrinsic motivation.

This program is already established in many instructional settings. The dynamic make up is based on research listed below:

(1.) Guidelines for Establishing and Maintaining Token Economies by Brenda Smith Myles, Mary Ross Moran, Christine K. Ormsbee and Joyce Anderson Downing

b. Purpose of Study:

The purpose of the study is to understand how extrinsic motivation will encourage student learning in the sixth grade class. I am doing this study to observe whether or not behavior modification plans have an effect on student development and learning growth. Also, I am hoping to see how the students respond to the token economy and how it reflects everyday life. Will the students be conditioned by external factors to establish intrinsic learning behaviors?

What changes do I want to occur? If the program is viewed as being successful, I want the intermediate teachers to adopt the plan as an instructional learning tool. The plan will establish the vertical articulation throughout the intermediate grades. This will facilitate student awareness and comprehension.
c. Definitions:

**EXTRINSIC MOTIVATION** depends on external reinforcers, such as stickers and popcorn parties, to satisfy needs; motives external to the individual are "considered necessary in order to initiate the learning process" (Sprinthall, Sprinthall and Oja, 1994)

**INTRINSIC MOTIVATION** occurs when behavior is engaged in for its own sake, for sheer joy and satisfaction derived from the performance itself. (Sprinthall, Sprinthall and Oja, 1994)

**TARGET BEHAVIORS** typically fall into three classes:

(a.) behaviors that need to be decreased

(b.) behaviors that need to be increased

(c.) behaviors that need to be maintained

**TOKEN ECONOMY** is often used with large groups of students as a way to increase or maintain appropriate behavior. Token economies are based on the principles of immediate and delayed gratification. Teachers reinforce students' desired behaviors immediately with tokens that may be exchanged at a later time for tangible, activity or privilege reinforcement. (Newcomer, 1993)

**FADING** involves an intermediate reward menu and a final reward menu.

**REINFORCERS** are tangible and intangible desirable reinforcement.

**GRADUATED REINFORCEMENT SYSTEM** is comprehensive; it allows teachers to monitor academic and social behavior throughout the day. The GRS system encourages parental involvement.
DESIRED OUTCOMES are results teachers and students strive to obtain.

INDIVIDUAL RESOURCE EXCHANGE is a self-contained board of trade. The purpose of the investment board is to structure the learning environment around compliant leadership through an assimilation of the economics. The system is crucial in providing positive feedback and boosting self-esteem.

REDEMPTION is an act or process of improvement or winning back.

MORAL ACT is prompted by a desire to do something on behalf of a person or group or to behave in accordance with a moral or standard.

MORAL refers to human's sense of what is right or proper.

VALUES are opinions about desirability or importance or rightness of something.

(Thomas, 1993)

d. Setting of the Study:

I. The Community

A. Historical Background

Approximately three hundred years have expired since the settling of the land Somers Point. John Somers developed the land for political and religious reasons. Historical accounts state that Somers built the first home on the highest point of Great Egg Harbor. At that time, the barrier islands were not suitable for living for most people and much of the desired property was found on the mainland.
The Somers' residence is a valued historical site in the Somers Point community. This structural fixture is the oldest house in Atlantic County.

The initial purpose of the land was for an Indian junction. But, with the large influx of prosperous and motivated European settlers the local tribes were forced out of the Somers Point area. Some of the bones and artifacts give reason to believe that the Indians lived in Somers Point for approximately ten thousand years.

The economic base of Somers Point was guided around claming, fishing, hunting and crafts. Many of the occupations were essential to the survival of the community. In addition, because of the deepwater harbor and the timber resources, many large sailboats were built along the Egg Harbor River and the Great Egg Harbor Bay. These boats were used for recreational and work related purposes. The waterways were a great resource for food, transportation and the fishing industry.

The area geographically west of Shore Road was undeveloped wilderness. Much of the land was used for farming. During this period of time, the population in Somers Point was extremely small and homogeneous.

The town of Somers Point changed with the invention of the steam engine. Its many resources suddenly became useless. The members of the community had to reevaluate their marketing techniques and learned that new enticement would come from historic value. During this economic revolution, many original settlers suffered tremendously and had to move out of town.
Throughout the twentieth century Somers Point evolved into a tight, close-knit community, which supported itself and the many residents.

B. Demographics

The most recent statistical information regarding the population of Somers Point was performed in 1998. Somers Point has a population of 11,749 people with 5,025 households. The racial disparity shows that 92.25% of the people are White, 4.36% of the people are African American and 2.36% of the people are Asian and Pacific Islander. Presently, the diverse makeup of the population is changing, due to an influx of Mexicans and Hispanics. The gender dynamics are 5,128 males versus 6,068 females.

The median resident age is 34 with the majority of population between the ages of 18-64. The population between ages of 5-17 is 1,675. Out of the entire population, 34% have high school diplomas and 15.48% have Bachelor degrees. Even with the overwhelming low number of people graduating from high school and higher educational work, the members of the community are quite supportive. The Parent Teacher Association is noticeably active throughout the schools and constantly strives to help.

The per capita income from the 2000 census was $17,783 with a median household income of $31,793.

The total civilian labor force was 6,339 with 1,531 professionals, 2,014 technicians, 1,576 in service occupations and 389 laborers and operators.

The majority of the real estate in Somers Point consists of residential housing. The approximate figure is 68%. The median value of a family dwelling is $110,000.
II. Schools

The study of my alternative discipline plan will be performed at Jordan Road School. The structure of the school was built in 1967. The instructional dynamics of the school range from kindergarten to eighth grade. The enrollment of students at Jordan Road School is 774. Approximately 10% of the students speak English as a second language. The primary language in the school district is English. The mobility rate of the district is 11.9%, but is changing due to an expansion of migrant work in the community. The average class size at Jordan Road is 21 with an administrator to student ratio of 1 to 387. The district group factor is C/E. The factoring of the district is based on the socio-economic status of the community. The length of the school day is five hours and fifty minutes with instructional time being five hours and twenty-one minutes.

The Somers Point School District is eligible for Early Childhood Funds, due to the number of individuals on free and reduced lunch. The additional funding has allowed the district to expand the kindergarten program and implement a pre-kindergarten program. With the instructional funding, the district budget has experienced changes. Many appropriations have been listed differently and money has been shuffled to meet the various district needs.
B. Special Programs

The Somers Point School District is a K-8 district that abides by the NJ Core Curriculum Standards. The district is well aware of the many diverse needs in the community and strives to accommodate the students with extracurricular programs. The additional programs provided are art, music, library and physical education. In addition, special area instructional programs are offered to a select group of students. The programs are instructional music, basic skills, special education and enrichment.

The school district of Somers Point is proud to call itself a neighborhood school. There are many activities outside of the school that are organized and structured by the Community Education Recreation program. This program is designed to engage all members of the community and strongly encourages parental involvement. A few examples of the tremendous success of the CER are The Good Old Days Picnic, Bayfest and The Trail of Two Cities.

In addition, Somers Point has a non-profit Foundation for Education program. The sole purpose of the organization is to improve the educational experience for students. The Foundation has supported many programs throughout the district including the Teacher Mini-Grants; Art Goes to School; Career Awareness, etc.

F. Significance of the Study:

The reason I am establishing a token economy is because many students have a difficult time paying attention in class. They have so many other interests that are much more appealing to them. I feel the token economy will encourage the students to stay focused and on-task.
The reward system will make learning fun and interesting. A token economy is a “Speedway to Spectacular Behavior,” that we develop according to guidelines. (Gallagher, 1988) Listed below is an example of a token economy and how it relates to an instructional setting.

1. Drive your own car. (Do your own work)
2. Use your seat belt. (Stay seated)
3. Signal your turn. (Raise your hand to talk)
4. Stay alert to drivers around you. (Listen while others are speaking)
5. Stay in your own lane. (Keep your hands and your feet to yourself)
6. Be a courteous driver. (Speak kindly and encourage others)
7. Control your speed and direction. (Use appropriate language and gestures)

(Gallagher, 1988) This simple development represents the lifelong structuring of civilized human beings. We live in a society that rewards people for following societal rules and regulations. Society’s way of rewarding is guided through particular behaviors that are viewed as desirable.

The conditioning effect of these societal values starts at a very early age. For example, when your parents scold you for acting inappropriately, the parental belief was shaped and molded through a period of growth and maturation. As an average thinking person, societal beliefs will saturate your subconscious. Individuals from the time they are born are shaped by token economies. For example, when parents give their child a toy to make them stop crying.
It is these learned behaviors that are extremely pervasive in America. The ultimate mission of a society is to have individuals working together and striving to accomplish desirable goals. In obtaining external rewards, many people feel worthy of their accomplishments. The process of receiving rewards for a period of time for particular behaviors can result in commingling of internal and external behaviors.

During the summer months, I work on the Ocean City Beach Patrol. My purpose of being on the beach is to protect and serve the public. My ten years of service have certainly been intriguing. I have been in contact with so many different people and observed many unique events. It is quite interesting to reflective on the individuals interacting at the shore.

I have noticed that many of the parents use rewards when correcting or disciplining their children. One phrase I commonly overhear is, “You’re not going on the rides if you keep acting that way.” The young child immediately becomes compliant and shows remorse. This simple act of shaping behavior is a token economy. A child either gains or loses rewards for a particular action. If this technique is successful for parents, why shouldn’t it be used in school systems? Aren’t the ultimate school behaviors developed by the combination of parental and educational values? The transition into the school system would be much smoother, which would result in better schools and students.

The significance of implementing a token economy is to improve learning behaviors.
The design and development of the program will encourage educational change and enhance instructional progress. As noncompliant behaviors diminish, learning increases. By working with other intermediate teachers on a weekly basis to address various concerns of discipline, students will develop better social skills, self-control and interpersonal communication. The participants in the study will consciously develop effective skills to facilitate wise educational and social decisions. The particular students will gain an awareness of socialization, tolerance and personal growth.

I believe this study is important because many effective schools share common goals as successful parents. They care consistently and compassionately about their children. They rely on extrinsic manipulation, sensitivity and nurture honest communication between adults and children. Parents strive to create and establish parameter for their children. These organized guidelines facilitate students in reaching their goals. I believe teachers who demonstrate these character traits are more successful in the classroom in shaping academic students, but more importantly better people.

G. Organization of the Study:

The paper will be organized in the following manner:

Chapter two is the Literature Review. This chapter is divided into five sections. The first section is a review of the theorists and their influence on extrinsic reward systems/token economies. Sections 2, 3 and 4 will focus on defining extrinsic discipline and how it is part of the hidden curriculum.
The last section will present effective strategies to use when evaluating a token economy system. Chapter three will discuss the methodology of the study and specifically outline how the task lists will be followed. Chapter four will focus on the presentation of the research findings to the staff and administration. The ultimate goal is to encourage other instructors in the district to adopt the disciplinary strategy and successful utilize it in the future. Chapter five will be an overall summary of the statistical data and reflective conclusions based on project research. It further will discuss the implications of the research study and its impact not only on the school, but the district as a whole.

Chapter 2

Literature Review

The recent years have shown a major concern over student discipline in the educational setting. Many literature articles discuss methods on how to shape children's behavior and increase instructional productivity. All across America parents, educators and legislators are searching to find the correct response. Educational strides are being taken to create interactive plans nationwide for all instructional areas. This movement seems to be proactive and constructive.
In *Guidelines for Establishing and Maintaining Token Economies*, the author strongly suggests that the focus should be placed on appropriate, positive skills rather than attempting to prevent the occurrence of inappropriate behavior. (Schilling and Cuvo, 1983) The participants interacting in the token economy are striving to gain positive results. The classroom is a small sample population of the world.

In the working world, people are constantly rewarded for acting appropriately, shouldn’t our classrooms resemble our society? In a utopian school community students will diligently study because it enhances their self-esteem, but reality has proven to be vastly different. Studies show that the majority of intermediate students work hard in school to do well on their report card. In this case, the motivating factor is obtaining an A, not enhancing self-worth. All of education is structurally based around extrinsic rewards, so why isn’t the discipline? An extrinsic reward program develops an underlining foundation of actions and consequences. A child being able to understand the conceptual framework will only benefit his or her existence in life.

Much has been written about student discipline and its role in developing curriculum. One of the current trends in education is a focus on the importance of structuring the academic time of students to increase their achievement. (Frederick and Walberg, 1980) This will allocate more time for creative instructional activities that can be rewarded by a token economy. For example, students can work in cooperative groups and have certain instructional duties to perform. This allows the teacher to have instructional flexibility when rewarding students.
Research indicates a need to establish a work-like atmosphere with changes in the classroom procedure such as increasing the availability of materials; providing increased monitoring; developing systematic procedures for transitions; and evaluating the necessity for extended use of the restroom, free time and rest periods. (Rich and Ross, 1989) I have organized the literature review into five major components. The first section will provide an introduction to the main perspectives and theories, which influence the current work on extrinsic values and token economies.

I want to highlight the intense efforts of Ivan Pavlov for the development of classical conditioning. The foundational structure of his extensive research in the field of behavior modifications has given valid support to many extrinsic value programs. I support his beliefs that conditioned stimuli will create conditioned responses. Sections 2, 3 and 4 will focus on defining extrinsic rewards/token economies, its place in the curriculum and who should be involved in an effective program.

Section 1: **The Theorists**

Ivan Pavlov was a psychologist who studied the effects of past experiences and how they shaped the future. He performed a famous laboratory experiment on a dog. The instructional study was based around an unconditioned stimuli, unconditioned result, conditioned stimuli and conditioned result. Pavlov’s attempt was to try to get the dog to salivate without the presence of meat.
Initially, Pavlov rewarded the dog with a strip of meat whenever the dog’s actions were compliant with his wishes. After a period of time the dog learned or was conditioned to believe that certain behaviors would earn him a prize. The anticipation of the prize caused the animal to salivate. The process of showing the meat created the unconditioned stimuli. The direct response of salivation was the unconditioned response.

As time expired, Pavlov assessed a new hypothesis. He wanted to test whether or not the dog would salivate without the presence of the meat. In order to develop or condition the dog he needed an outside variable. The outside variable or conditioned stimulus was a bell. Over a period of time, Pavlov created a structured association with the meat and the bell. Every time the dog was obedient he sounded the bell with the piece of meat. The bell was essentially taking the place of the meat. The learned behavior by the dog was the association of the bell and meat. The dog began to salivate when only the bell was sounded. Pavlov created a desired conditioned response. He was able to condition the animal with external variables and achieve the same satisfactory result. This form of psychology is called classical conditioning. The foundational basis is shaped around conditioning people to work towards a reward without the reward being present. Is this psychological theory practical in a diversified classroom? Will external variables be effective stimuli for obtaining desirable student actions? Do external rewards shape intrinsic morals and values?

Jean Piaget’s psychological research and development was done in the field of moral construction.
Piaget’s research focused on internal wellbeing and claimed individual growth was guided through certain actions. Every action was created through a specific environment. Based on his reflective observations of children playing, he concluded that moral development is related to external surroundings. Piaget labeled this particular phase the “heteronomous” stage of moral reasoning, characterized by a strict adherence to rules and regulations and obedience to authority. According to Piaget, the thinking of young children is characterized by egocentrism. This egocentrism shapes the present existence of the child. In a sense this existence causes children to project their thoughts and wishes onto others. As children go through the period of maturation, they begin to rationalize and interpret the rules critically. The nature of consequences from past experiences develops this keen awareness. The ability to show a sense of continuity and mutual respect is associated with a child’s cognitive transfer from egocentrism to perspective taking. Piaget is a strong believer that moral development is structured through positive interpersonal communication when developing a solution to an adverse situation.

Piaget concluded by stating that schools should allow students to work together and resolve and find creative methods to resolve problems. This act of compromising and negotiating molds the moral development and sets a basis for many life endeavors. He suggested that classroom teachers outline the critical thinking foundation, but give students the opportunity to work independently.

**What are the primary differences between Pavlov and Piaget?** Ivan Pavlov focused much of his work on conditioning individuals by certain stimuli. His psychological beliefs were structured around classical conditioning.
People respond to external variables and factors. The sense of gratification comes from extrinsic motivation and the art of conditioning behavior. In classical conditioning, an organism learns a response to a neutral stimulus that normally does not bring about that response. (Robert S. Feldman, 1990) For instance, consider someone whose stomach begins to rumble and whose mouth waters at the sight of McDonald’s golden arches. (Robert S. Feldman, 1990) The cause of the action is classical conditioning.

Jean Piaget’s research was based around cognitive development, the process by which a child’s understanding of the world changes as a function of age and experience. (Feldman, 1990) Piaget’s steps range from birth to adulthood. They are divided up into four categories: Sensorimotor, Preoperational, Concrete operational and Formal operation. (Feldman, 1990) During these stages, the child experiences many changes with mental capacity and ability. Piaget states that children instinctually develop language and cognitive thinking skills.

The psychologists have differing philosophies to how children respond to environmental changes. Pavlov suggests that individuals learn by associating external factors with certain stimuli, the bell with the piece of meat. This theory might be the underlining foundation of what motivates children to learn. Are children learning to receive the external or internal gratification?

Piaget’s theory is guided by intrinsic motivation and developed physiological mental ability. Most developmental psychologists do agree that, although the processes that underlie the changes in cognitive abilities may not be those suggested by his theory,
Piaget has provided us with an accurate account of age related changes in cognitive development. Moreover, the influence of the theory has been enormous. (Ginsburg and Opper, 1988) For example, Piaget suggests that increase in cognitive performance cannot be attained unless both cognitive readiness brought about by maturation and appropriate environmental stimulation are present. This view has been influential in determining the nature and structure of educational curricula and how children are taught. (Dore and Dumas, 1987)

**How do Pavlov and Piaget’s philosophies coincide?** I feel the early stages of Pavlov’s theory, creates the experiential knowledge for a child to react when they are developmental ready. The outcome of an experience shapes how a child will handle a similar situation in the future. If children do not have the conditioning effect of situational experiences, they will not know how to respond when they are developmental ready. I feel Pavlov’s theory is the underlining component to Piaget’s philosophical beliefs. Without prior knowledge, sound learning will not be possible even if the child is developmentally ready.

**II. What does Extrinsic Motivation encourage?**

The development of any behavior modification plan should be guided through a logical interpretation of society’s norms. Furthermore, the reinforcement strategies should emulate general rules of society. For example, if the particular act is viewed as acceptable a sign of appreciation should be shown. The appreciation could be through rewards, gifts or praises.
Our school systems are small sample populations of our many different societies. If a school is going to operate efficiently and be instructionally effective it must reflect society's philosophies. This is a concept that should eventually be accepted by the majority of individuals involved in education. Some people might not agree with the manipulative approach of disciplining, but most will say it is effective. The overall parameters of extrinsic motivation should filter through all aspects of an educational institution. The children need to know that the policy pertains to every class and every situation in the school. The consistency of the policy will help strength the instructional flow and continuity, which will benefit the entire learning process. The consistency and effectiveness will diminish if only a few people utilize the approach.

III. What Kind of School Environment and Curriculum Fosters Extrinsic Motivation:

Token economies are a commonly used approach to student behavior management. (Gallagher, 1988; Kazdin, 1977) Token economies are usually structured around a set of norms and praise individuals for exhausting a desired behavior. There are various stages of token economy. The instructor can develop an informal setting where the economy is used only during certain events or a more rigid approach where it is utilized routinely. Presently, many teachers are using extrinsic values to motivate students and are oblivious to the act. For example, if you reward students with grades, you are instructing through extrinsic motivation. Many students study just to achieve good grades, not because it makes them feel good. There are certain procedures that should be followed when designing a token economy.
The following stages in planning a token economy are discussed: (Guidelines for Establishing and maintaining Token Economies, Myles)

(a.) Identify a target behavior
(b.) Select particular reinforcement
(c.) Identify token types and schedules
(d.) Plan token distribution and redemption strategies

A crucial component of a token economy is the identification of a target behavior. Target behaviors generally fall into three classes: (a.) behaviors that need to be decreased; (b.) behaviors that need to be increased; (c.) behaviors that need to be maintained. The teacher should focus on positive attributes and try to avoid reprimanding when the student is acting inappropriately. For example, students must raise their hands before talking is more positive than students cannot talk out in class. (Myles, 1992) Many of the target behaviors should be observable and students should have a thorough understanding of what is expected of them. The behaviors can range from sitting down after a project to acting appropriately during a fire drill. Many target behaviors are shaped by teachers and students to allow for fairness. You want students to feel part of the decision making process.

The art of establishing an extrinsic reward system can also encourage intrinsic motivation. The individuals involved sense a good feeling of wellbeing when they are working towards the particular goal.
There are certain guidelines that should be developed and followed that will enhance instructional disciplinary approaches.

Jacques S. Benning and Edward A. Wayne (Kappan, 1998) state the essential appropriations for a constructive learning environment. They advocate the following pedagogical principles:

(1.) Identify and list the virtues and relevant behavior traits pertinent for children to learn.

(2.) Establish those virtues or traits as goals for the entire school community.

(3.) Provide the opportunity for students to practice the behaviors associated with such traits and values.

(4.) Praise students, individually or as a group-publicly or privately-when a desirable behavior is displayed.

(5.) Identify undesirable traits and prohibit them. Establish and enforce clear, unpleasant and appropriate consequences for such misbehavior by individuals or groups.

(6.) Use the schools formal curriculum and ceremonies to support such activities.

(7.) Hire, train and retain staff members who actively support such policies. (Pg. 433)

Effective schools rely on extrinsic control, clarity and consistency, nature and honesty of communication to shape individual character. (Bond, 1993)
Also, the true essence of moral behavior is conditioned through extrinsic rewards. Individuals learn by experiencing many situations and acting appropriately or inappropriately. And, consequences are derived from each situation. For example, if a person gets praise for a particular behavior students will try to duplicate that behavior when ever possible.

**Discipline:**

Extrinsic motivation or discipline is the creation and enforcement of external variables. The students will be conditioned through external factors to act and perform certain instructional tasks. (Anderson, 1997)

The disciplinary tactics performed are vital to the development of a child. A child’s inappropriate behavior must be controlled through the minimal force necessary for achieving control. This process id performed by the teacher. Often educators react to children’s behavior by tightening the school’s disciplinary code. This is an ineffective approach because it does not deal with the direct problem immediately. Realistic consequences must be present and utilized efficiently when handling infractions. Moral character is not genetically passed through generations it is shaped through environmental actions and consequences. Over a period of time, with token economy plan, moral character will be developed.

The most productive instructional strategy for developing social responsibility is one that will be used in the community. Individuals are constantly abiding by rules and regulations to avoid undesirable consequences.
Our entire country is based around extrinsic motivation. School systems should be a true reflection of our society!

**Creating a Moral Climate through Extrinsic Motivation:**

Social awareness is a vital component of a child’s developmental process. Children grow tremendously through social interaction. Social interaction is based on the premise of responding to exterior stimuli. For example, variables that trigger cognitive thinking skills and promote stimulation encourage critical thinking.

The more a child is exposed to various forms of stimulation, the more they will learn. The human brain functions as a sponge and constantly absorbs environmental encounters. And, through experience the child will understand the proper and appropriate methods for handling a variety of situations.

Children want to be accepted and obtain desirable results. By wanting to be accepted and gathering certain results, they are being motivated by external variables. These factors encourage and shape the actions of children to act according. The response or consequence they receive is laced with praise, acceptance and rewards. Every child wants to be accepted by his or her peers.

**A Focus on Service:**

Individuals who are actively engaged in extrinsic motivation should reflect on their behavior changes and learning experiences.
The most common case of passing down knowledge comes from parents. Parents are guiding their children to think actively, make wise decisions and prosper with age. The knowledge possessed by the parents comes from lifelong experiences and outcomes. Parents should attempt to condition their children with this insight.

**Extrinsic Motivation and Life:**

The extrinsic motivation program is designed to represent similar aspects of everyday life. The classroom setting will resemble a learning environment that rewards students for behaving appropriately in certain situations, similar to working atmospheres.

The premise of the program is based on a learning continuum and should provide students with positive feedback. The constructive feedback should be essential for lifelong endeavors. For example, when students enter the work force, they will be prepared to conquer ever-changing challenges. The overall objective of the behavior modification program is to specify consequences for every action.

**Extrinsic Motivation includes a meaningful and challenging academic curriculum that respects all learners and helps them succeed:**

The instructional curriculum and extrinsic motivation should be presented as inseparable. The motivational aspects in the educational setting will encourage the learners to do well in the academic areas. Extrinsic motivation drives students to excellence! Studies show that when students receive praise and positive feedback, their instructional success increases tremendously. The individuals involved have a sense of
value, worth and acceptance. These characteristics boost self-esteem and encourage lifelong learning.

Also, a school that utilizes extrinsic motivation makes effective use of active teaching and learning styles such as cooperative learning, problem solving techniques, experienced based projects and peer mediation. One major aspect of respecting children is to respect the way they learn.

**Extrinsic motivation should strive to encourage intrinsic satisfaction:**

As students are actively working towards a goal, the end result or accomplishment reflects intrinsic qualities. When individuals accomplish a goal or mission they generally feel internally self-actualized.

For example, if a person works extremely hard to get a promotion, not only do they receive the extrinsic reward, but they also feel good about their diligence. Schools should use the instructional basis of extrinsic motivation to encourage intrinsic results. The overall atmosphere of the educational setting will be more conducive to learning. Intrinsic satisfaction can be derived from certain educational strategies such as cooperative learning, partnership discussion, and methods of brainstorming.

**IV: Who should be part of designing and developing extrinsic motivation in a school setting?**

The entire school staff, parents and community leaders should share the responsibility of the certain behavior modification. The implementation of the plan should not be fragmented. A school district must have collaborative methods to work together and
encourage unification. The essential values and goals of the plan should be disseminated from the community and incorporated into the school system.

If extrinsic motivation is going to be a valid form of guiding children, there must be leaders who support and encourage its efforts. The approach should create an identity in the system and work within the hidden curriculum. There should be a committee formed to oversee the disciplinary technique and make pertinent changes when necessary. Also, students should be an integral component of devising the program.

School Staff:

In order to have an effective program, the entire school community should be involved in the implementation. For instance, teachers, administrators, instructional aides and support staff should all have a vital role in discussing the pertinent techniques. The program should be progressive, pervasive and ongoing. A program is only as good as the substance individuals put into it.

The administration should provide time for members of the staff to collaborate and discuss their instruction views. The brainstorming method for program development allows for staff representation and high staff morale. Professional staff members have sound educational knowledge, which can be very useful.

Finally, the staff must stress to the students that authentic accomplishments only come from hard work. Students must envision the beneficial results from sheer diligence and perseverance.
The end result of extrinsic motivation is blemished when individuals choose to use dishonest means to get there.

*Parents' Role:*

The parents must play a vital role in the establishment of the school wide plan. The development of the instructional movement should transfer into the home setting. The process should be on a continuum where parents play an essential part. For instance, if the parents do not reinforce the particular plan it will become ineffective in the school setting. The school should take the appropriate steps to communicate with the parents about particular goals and visions.

The staff members should present certain styles and methods to the parents to help facilitate the process. It is essential that the schools and families in the community have a trusting relationship. A school is representative of a working village and if one component is missing, the village will not operate efficiently.

*Community Involvement:*

The surrounding community and school system should form a partnership. In essence, the school system is a small sample population of the direct society. Where could you find more valuable and useful input? Community involvement in planning a motivational plan is extremely critical. The alliances the school builds with the parents, business leaders and community members strengthen the moral support structure children need to develop sound character. As professional leaders and members of an ever-changing
society, we should encourage community members to participate in educational progression. Their expertise in crucial areas is valuable.

V. **How to evaluate effective extrinsic motivation/token economies:**

The true measurement or assessment of an extrinsic motivation plan comes from the evaluation of the participants. A collaborative team should develop the process of evaluation. Consistency, fairness and instructional intent should be part of the design. An effective token economy reduces disruptive or distracting behaviors and increases or maintains student behaviors that support instructional environments. (Token Economies, 1992) Moreover, token economies provide a concrete means for students to evaluate their own behavior.

With a carefully planned token economy, both teachers and students benefit. Educators spend less time managing and more time teaching. Students have more opportunities to learn because academic engaged time is increased. (Token Economies, 1992)

This literature review has given an overview of the parameters that you need for developing an extrinsic motivation plan. With the widespread interest in the motivational program among the public, school practitioners and researchers, I encourage the implementation of the instructional plan.
Opposing views to extrinsic motivation: Many critics of extrinsic motivation feel the process relies too heavily on external reinforcement and not enough on intrinsic worth. Intrinsic motivation occurs when behavior is engaged in for its own sake, for the sheer joy and satisfaction derived from the performance itself. (Sprinthall, Sprinthall and Oja, 1994) The motivation is reinforced by self-satisfaction and pleasure in learning a new task. An example of how to develop a student intrinsically is by letting students actively engage in a task in the absence of external control. Do not bring their performance under control of rewards external to the task. (Sprinthall, Sprinthall and Oja, 1994)

Advocates of intrinsic motivation feel there are many problems with issuing rewards for appropriate classroom behavior. Kohn (1993) notes that the widespread use of rewards and incentives “lives in our collective consciousness and affects what we do everyday.” Individuals are being conditioned by external surroundings to perform certain obligations. In doing this, the child doesn’t gain a true perspective of what they are trying to gain. Are they accomplishing a goal or gaining a reward?

Rewards and incentives are dependent on control from outside the individual, thus restraining the autonomous functioning. Rewards do not stand in opposition to punishment, but are the second face of an external coercive method. (Kohn, 1993)

In closing, external rewards set the foundation for intrinsic success. The two rewards systems work simultaneously. When you work extremely hard and accomplish a goal, you are usually rewarded by an external factor. It might be money, praise, diploma, etc. As you accomplish this goal, you feel extremely proud of yourself. (Self-worth)
For instance, I am in a graduate program to become a principal. The reason I am so disciplined with my studies is because I want to receive my diploma. On the day of graduation, I will feel self-actualized if everything goes as planned. The diploma is the external factor and the self-actualization is the internal factor. If I do not receive my diploma in May, I certainly will not feel self-actualized. The extrinsic motivation is the driving force behind the intrinsic worth. When we ask students to establish goals, we are truly asking them to create extrinsic motivators. These motivators shape the parameters for how students view themselves and react to situations. In order to gain self-awareness, a token economy must be present.

Chapter 3
The Design of The Study

For years, education has played a major role in guiding, structuring and shaping the lives of children. Children use school to deal with the many obstacles and experiences in life. The schooling atmosphere is very reflective of the critical tasks and problems children will face as they grow. One major responsibility of instructing children is to make sure they know how to use the tools for lifelong learning and success. For instance, children must be able to interact together and reflect on learning experiences. How well a child learns from the many experiences, will determine how well they make constructive decisions.
The Design of the Study:

The researcher believed a token economy, through a multitude of instructional experiences, would help children make sound, proactive lifelong decisions. The design of the study had two critical components. The initial stages of the economy were structured to give out immediate rewards for certain learned behaviors. For instance, if the instructional objective was for the students to learn to interact, they were given rewards from the teacher if their interaction was viewed successful. The intent of the reinforcement strategy was to develop learning by rewarding with desirable items. During the initial stages, the students were rewarded for accomplishing beginning of the year tasks, such as bringing back their lunch and medical forms on time. At that particular point, the teacher was rewarded for student responsibility. The purpose of the initial rewarding was to establish a clear student/teacher relationship. Initially, the learning students were rewarded every time. This process lasted for approximately four weeks. The second stage of the token economy began in October. At this point in the study, the students knew what was expected of them and how to gain token dollars. The assessment for change was based on the number of points being earned by the students. For instance, almost every student earned at least ten dollars during the last week of the first stage. I felt the students were conditioned to the first stage of the study.

The second stage of the token economy was designed to wean the students away from the immediate reward system.
The instructional design was to condition the students in the earlier stages with pleasurable rewards, which made them feel good and have them continue just for the good, intrinsic feelings. The purpose of the token economy was to establish learning through external rewards and have it continue for intrinsic success. During this stage, the students were rewarded not for initial compliance/learning, but for length of learning. For example, they would receive a token if they were able to stay on task without being distracted for a specified amount of time. During this stage, I eliminated the immediate gratification component of the study. This approach lasted for approximately five weeks, until early November.

The third stage of the study rewarded students for all day learning. If the student could stay on task for mathematics, language arts, science and social studies they were rewarded. The token dollars were given out at the end of the school day. This stage lasted for three weeks, until December 1, 2001.

The fourth stage was to see if the students absorbed the appropriate learning behaviors and were now being driven by intrinsic motivators. Rewards were not given out during this stage. This component of the study lasted for three weeks, until December 21, 2001.

The duration of the token economy was 4 months. It was set up in a sixth grade class at Jordan Road School. The design of the study was to see how the token economy affected the learning behavior of students.
Limitations of Study:

The initial stage of the token economy was structured around reinforcing desired learning behaviors with external rewards. This process is referred to as extrinsic motivation. The motivation to comply or aspire was achieved through tangible and intangible results. The instructional approach is the opposite of intrinsic motivation.

The latter stages of the study were guided through intrinsic motivation. Intrinsic motivation is an internal feeling of goodness for being praised. For example, if a child accomplishes a task, they do not need a tangible reward to feel self actualized. The participant involved in completing the task is motivated and driven by self-worth, not external rewards.

Many researchers find that incentives and rewards require students to depend on outside variables. They are simply working to gain a prize or reward. Rewards do not stand in opposition to punishment, but are second face of an externally coercive method. (Kohn, 1993) The problem is not whether the person experiences pain or pleasure, but the fact that the pain or pleasure is imposed from outside the individual. Also, external rewards while maintaining productivity reduce interest in the task, diminishing the likelihood that the task will be engaged for its own sake in the future. (Kaplan, 1990) Furthermore, if intrinsic motivation already exists, the use of rewards, which is meant to encourage students, can be especially detrimental to maintaining interest in the task. (Kaplan, 1990; Katz, 1988)
Participants:

Focusing on the basic elements of successful learning, environment, modeling and curriculum design, the researcher was very specific in choosing the classroom teacher. The teacher was a second year, non-tenured professional, who experienced the normal struggles during his first year. He was chosen because of his problems with classroom management the previous school year. He wanted to have a clear and precise classroom management tool in his daily instruction. He felt it would increase learning expectations and student achievement.

The population, which was studied, was a 6th grade classroom that consisted of 10 girls and 12 boys at Jordan Road School in Somers Point. The researcher compared the impact a token economy had on the social and academic success of these particular students compared with data from a similar 6th grade class, which did not incorporate a token economy into their course of study. The class was a regular education class with 10 boys and 11 girls. The researcher chose the sixth grade class because of the makeup of the child. At the age of twelve, the child is experiencing many psychological and physiological changes. It was a perfect age to assess the theories of Pavlov and Piaget. The researcher felt they would be developmentally prepared to have learning behavior influenced by external rewards. At this age, Piaget felt the students had the ability to assess rules critically and selectively apply these rules to accomplish a goal or mission.

The researcher used a multitude of independent resources to gather data. The sources viewed were weekly lesson plans, classroom journals observations, student report cards, surveys and questionnaires. Three grades are housed at Jordan Road and three at Dawes
Avenue. The researcher feels the statistical research and data received from this study will benefit the other classes tremendously.

**Description of the instrument:**

The initial step for collecting data was to develop a valid survey for the specific learning assessment. I chose two surveys that were used in 1994 by The Curry School of Education, University of Virginia. The surveys were used to do similar research on extrinsic and intrinsic motivation. The first survey was used as a pre-assessment to see if the students could tell the difference between the two instructional approaches. (Appendix A) The follow-up survey was a post assessment to gather data and compare it to the results from the pre-assessment research tool. (Appendix B) The surveys were disseminated to forty-three students in the sixth grade. The students were in regular education learning environments. The surveys were chosen because of the feedback they present to educators. The information received can be used to help teachers with classroom management techniques.

**Collection of Data:**

The extrinsic v. intrinsic motivational surveys were distributed to the students. Forty-three pre and post surveys were given out. This was to establish a valid research base. The surveys were given to the students in both learning environments. The students were given a letter to show their parents before they were involved in the research study. The letter explained the plan and why it was being implemented. (Appendix C) The researcher explained the surveys, pre-assessment and post assessment to the students before they charted their answers.
The pre-assessment survey outlined six different categories that related to intrinsic and extrinsic motivation. The categories were Challenge v. Easy Work, Curiosity v. Pleasing teacher/Getting Grades, Independent Mastery v. Dependence on Teacher, Independent Judgment v. Reliance on Teacher's Judgment, Internal Criteria v. External Criteria and Self-Confidence v. Helplessness. The students were asked to place an E next to the extrinsic motivators and I next to the intrinsic motivators. The pre-assessment survey was designed to familiarize the students with the different learning styles and approaches. The survey consisted of twenty-four statements. The survey presented four statements in each category.

The post assessment survey was given after the fourth stage of the research study. The survey was dispersed to forty-three students. The post assessment survey consisted of directions for the students to follow. The students were asked to read both parts of each statement and explain how that statement described them. They were asked to write the appropriate letter next to the part they chose. The other side of the statement should have stayed blank. The three letters a, b and c represented Rarely true for me, Somewhat true for me and Very true for me. The post assessment survey consisted of twenty-four statements.

The open-ended questions allowed the students to elaborate on the choices they selected. The students were given four questions to answer. (Appendix D) The questions allowed the students to give a personal explanation and reflection of how they responded to the survey. The open-ended questions and post assessment survey were completed by February 1, 2002. Any statistical data received after that date was viewed as invalid.
Data Analysis:

The data was analyzed based on the responses provided by the students. The researcher analyzed the data from the post assessment survey and pre-assessment survey from the two classes. The figures were converted to a standard mean, standard deviation, a frequency chart and student demographics. The surveys that were not fully completed were not used in the final analysis of the data. The responses to the questions were compared to the overall score.

Chapter 4

Presentation of Research Findings

The two selected groups who participated in the study were chosen from the sixth grade. The students were in regular education classes and heterogeneously grouped. The sixth grade was chosen because of the makeup of the child. Forty-three participants were involved in the study. Twenty-one of the students were exposed to the four-phase research study and twenty-two were not. The group consisting of twenty-one students was the experimental group. The control group was made up of twenty-two students. The results of the two groups were compared to determine if there was a difference in student achievement among the segregated learning groups.
To analyze the data collected, a point system was given to the pre-assessment survey and the post assessment survey. While responding to the pre-assessment survey, the students were asked to place a check next to the scenario that pertained to them. One scenario was an extrinsic motivator and the other an intrinsic. The extrinsic responses were given a score of one. The intrinsic responses were given a score of two. The graphs/charts represent the results of the raw data from the pre-assessment survey. The charts/graphs show the mean of the forty-three participants.

The purpose of the pre-assessment was to see how the students responded to the extrinsic and intrinsic scenarios. The pre-assessment established a measurement basis for the researcher. For example, if the participants in the study were already intrinsically motivated the intent of the study would have proved to be invalid. The scores on the pre-assessment varied accordingly. The students' responses in the experimental group fluctuated between 1.1 and 1.85. They scored extremely high extrinsically on questions 2, 6, 10, 11, 16, 17, 19 and 22. The mean score for these questions was approximately 1.25. If a mean of 1.00 was given, everyone was extrinsically motivated for that particular question. All of the questions stated, pertain to doing well in school and getting good grades. Students have been conditioned from an early age to believe grades are a true reflection of learning.
The fluctuation of responses was not surprising. Through observation, the experimental group seemed very diversified in the initial stages of the research study. The demographics and socioeconomic status of the specific sampled population varied tremendously. I truly feel family structure and stability play a major role in any pre-assessment phase. Family exposure to external variables shapes beliefs and lasting impressions for children. Family involvement and awareness are crucial for constructive learning.

The students’ responses in the control group fluctuated between 1.3 and 1.7, but the majority of the responses were above average intrinsically. Only questions 6, 7 and 13 were higher extrinsically. It was quite surprising to see the prevalence of intrinsic motivation in this particular group. These students were already being encouraged to learn intrinsically. After I assessed the population, I spoke with a fifth grade teacher and explained the learning motivation of the control group. She stated her classroom leadership techniques are guided through self-motivation and personal diligence. She also stated that she had most of the students in the control group. The majority of the students in the control population were already intrinsically motivated. I feel when you sample from a low number population your control group is not truly representative. In future research, I will draw from a much larger population. (View the following pages for statistical charted results)
Mean for Pre-Assessment
Experimental Group/21 students

24 Questions

0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1.8
2.0

2.0
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Mean for Pre-Assessment
Control Group/22 students

24 Questions
The post assessment was also measured by a point system. The point system was categorized as 0 (doesn’t apply), 1 (rarely applies), 2 (somewhat applies) and 3 (always applies). And, the numbers were placed in two different components, part A = extrinsic and part B = intrinsic. The post assessment survey was given to all forty-three participants (22 students in the control and 21 students in the experimental). The statistical results of the mean for the control and experimental groups are displayed by graphs. The mean represents the average for the number of responses and standard deviation shows how far a numerical reading is from the average. By looking at the two graphs, you can certainly observe variations in learning preferences and differences by the control and experimental groups. The participants’ mean in the control group was approximately 27.73 intrinsically and approximately 27.635 extrinsically. This gives the conclusion that they were favoring selections based on intrinsic learning, but only slightly. The students actually scored lower intrinsically on the post-assessment than the pre-assessment in the control group. I attribute the change to new learning expectations in sixth grade. The control group responses went up extrinsically and down intrinsically. The random sampling proved to be counterproductive for the control population. I should have drawn from a larger population!

The experimental group responded 27.65 extrinsically and 29.05 intrinsically. The experimental group made intrinsic growth from the pre-assessment phase. The overall fluctuation of responses from the pre-assessment was limited in the post assessment survey. A majority of the responses were intrinsically motivated.
Mean of Post Assessment Survey
Experimental Group Responses

Red/Extrinsic, Green/Intrinsic
Mean of Post Assessment Survey
Control Group Responses

Red/Extrinsic, Green/Intrinsic
Intrinsic learning growth definitely occurred over the four-month study, but it is hard for me to assess it was from the research plan. Without a truly valid control group for measurement, other factors have to be considered. For instance, the learning and perseverance of students might have been affected by physical maturation and growth. As children mature, they tend to view situations differently.

The demographics of a study give the breakdown of how certain groups responded to various scenarios. In the research study, the participants were categorized by gender and age. This allowed the researcher to analyze the data and see how certain groups responded. For instance, are eleven-year old girls more intrinsically motivated than twelve-year old boys? And, does gender play a role in motivation? A total response for each group was developed to show a disparity between extrinsic and intrinsic motivators. The colors represent a particular group. The groups are segregated by boys/extrinsic, boys/intrinsic, girls/extrinsic and girls/intrinsic. The breakdown of colors for the graph is RED/girls, extrinsic, GREEN/boys, extrinsic, BLUE/girls, intrinsic and YELLOW/boys, intrinsic. By analyzing the graph, I concluded:

- EXTRINSIC BOYS- age eleven, 62 responses
- EXTRINSIC BOYS- age twelve, 133 responses
- EXTRINSIC GIRLS- age eleven, 43 responses
- EXTRINSIC GIRLS- age twelve, 107 responses
- INTRINSIC BOYS- age eleven, 136 responses
- INTRINSIC BOYS- age twelve, 204 responses
- INTRINSIC GIRLS- age eleven, 187 responses
- INTRINSIC GIRLS- age twelve 158 responses
Demographics for Boys and Girls
43 participants (Responses)

Red, Green (Ext.) Blue, Yellow (Int.)
By breaking down the data, it is clear the responses are greater intrinsically. Surprisingly, the largest number of intrinsic responses came from the twelve year old boys. The smallest number came from the eleven year old boys. Intrinsically the girls were rather close. (187, 158)

The largest number for the extrinsic responses came from the twelve year old boys. The twelve-year old boys scored the highest intrinsically and extrinsically. The lowest number of responses came from the eleven-year old girls, 43. By looking at the chart, you can see the data responses fluctuate for both ages and genders. There is a mixed disparity throughout the eight groups. The control and experimental groups were tallied together. Forty-three participants were involved in the research study. The total number of responses was 1,030.

A frequency chart was calculated for the forty-three participants to show the number of extrinsic and intrinsic responses. The extrinsic responses are represented by the color red and the intrinsic responses are represented by the color green. The frequency graph charts the number of responses given by the participants. The frequency average for the control group was approximately 9 responses extrinsic and 11 responses intrinsic. The average for the experimental group was approximately 7 extrinsic and 14 intrinsic. The frequency means were tallied for the twenty-four questions post assessment survey. The majority of the students scored very high with the intrinsic motivators.
Mean of Frequency Chart
Control Group

Red/Extrinsic Green/Intrinsic
Mean of Frequency Chart
Experimental Group

Red/Extrinsic, Green/Intrinsic
I attribute this range to many individuals being intrinsically motivated before the initial stage of the study. The responses were grouped for the forty-three participants.

Chapter Five

Summary of Findings, Conclusions and Further Study

Introduction

This chapter included the summary of findings, conclusions and recommendations for future study. The purpose of this study was to determine how a behavior modification plan would develop intrinsic learning through external variables. The population of the study consisted of forty-three students. Twenty-one students were in the experimental group and twenty-two were in the control group. All of the pupils were given pre-assessment and post assessment surveys. The results of the two groups were analyzed, charted and compared.

Summary of Findings

The findings of the study state that learning can be encouraged through extrinsic motivation. The students in the experimental group were guided through four phases. Upon completion of the fourth stage, the students scored higher on the post assessment than the pre-assessment. The range on the pre-assessment was between 1.1 and 1.85. The closer the scores were to 1.0, the more the responses favored extrinsic motivation. The closer the scores were to 2.0, the more the responses favored intrinsic motivation.
During the pre-assessment stage the many responses varied accordingly.

The results were certainly anticipated and expected. If the results were heavily favored intrinsically, the research study would have been somewhat invalid and pointless. Many of the students in this particular group favored extrinsic motivation to questions pertaining to grades. Many students feel true learning is how well you do on a report card. For instance, if a student receives an A, they must have knowledge in that particular academic area. According to Bond (1993) that is not always the case. Many students have the ability to manipulate external variables in order to produce a desirable result. A grade of any assessment is a small fraction of how much has been learned and retained. (Bond, 1993) Ultimately, the research study was trying to teach students to view learning in a different light, more on how they learn and what they receive, instead of overall score.

Interesting enough, the control group favored more intrinsic readings than the experimental group. The range of scores was between 1.3 and 1.7. Only questions 6, 7 and 13 were charted higher extrinsically. The majority of the students in the control group were already been affected by intrinsic motivation. This created a problem for the study comparison mode. When comparing two populations, your control group is supposed to stay constant and unchanged. The purpose of having a control group is to show how much growth occurred in the experimental group and whether or not your study proved to be effective. Since the control group was already intrinsic motivated, it was difficult to assess the validity of the research study performed on the experimental group.
The mean for the experimental group on the post assessment was 27.65 extrinsically and 29.05 intrinsically. The changes and growth were charted to show the differences from the pre-assessment. The pupils in the experimental group definitely acquired intrinsic learning development. The students did not respond so heavily for overall grades as a reflection of learning. It is hard for me to attribute all of the learning change to the four-month study, since the control group favored intrinsic learning as well. Certain external and physiological variables might have played a role in the various learning changes. For instance, different parental influences and physical/emotional maturation possibly occurred in the sample population. Expectations of learning change with physical, psychological and emotional stresses. (Feldman, 1990)

**Did the token economy build character?**

After doing the research study, I feel the token economy played a part in building character traits such as responsibility, social awareness and goal setting, but only a small part. After the charted assessment and observant interactions of the students, I feel physical student maturation and family values are integral components of intrinsic learning success. This perception was proven to me through the control group in the study. Much of the intrinsic learning in the control group was already expected from the students. It was ingrained from outside variables and past practices. Yes, the token economy helped to reinforce existing character traits, but I do not feel it built new character traits.
How did the plan make classroom instruction more effective?

The token economy facilitated the instruction by creating sound, tangible guidelines for the students. The students knew what was expected of them and how to achieve satisfactory results. I feel students gain security and stability when they have certain parameters to follow. The parameters develop a sense of knowing and understanding. Effective instructional leadership is based on proactive classroom management techniques. The token economy plan help guide and facilitate instruction.

How did the plan encourage social and educational awareness?

The research plan helped facilitate social awareness and togetherness among the student body. Many of the projects were designed to have the students interact cooperatively together and problem solve for token points. The learning behavior plan encouraged students to be able to work diligently and smoothly throughout the class. The premise was shaped and guided by life aspects outside of the classroom and constructive ways of social interaction. As the plan progressed, the students became much more aware of social learning behaviors that were going to earn them points. The learned or conditioned process took approximately four weeks for most of the student body. Some students are still having trouble with interaction and social mannerisms.
Conclusions

From the data gathered in this study and from the statistical analysis performed, it could be said that there were differences between the students in the control and experimental groups. As to how students value extrinsic/intrinsic learning, the study was skewed because of the bias control population. In a future study, variations to significant data could be prevalent. Also, the population to sample from will be much larger.

Further Study

There are several recommendations that are suggested for further research. First, the number of students to be surveyed should be a larger sample. A larger sample would help validate conclusions made in this paper. Second, another survey could be conducted in the same school with the same students to determine if their attitudes regarding intrinsic v. extrinsic learning are still the same. Lastly, this exact survey and study could be reproduced in other areas of the country to determine if an instructional token economy has an effect on a larger and more diversified group of students.
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### Category: Challenge v. Easy Work

1. Some students like to go on to new work that is at a more difficult level **BUT** Some students would rather stick to the assignments that are pretty easy to do.

2. Some students think it is fun to solve difficult problems **BUT** Some students like to solve problems they already know how to solve.

3. Some students like to take classes that are hard **BUT** Some students prefer to take classes they know they will do well in.

4. Some students like to learn as much as they can, even by reading and studying materials that are hard **BUT** Some students like to learn what they can from materials that are easy to read and understand.

### Category: Curiosity v. Pleasing Teacher/Getting Grades

5. Some students read extra books at home because they are interested in the subject of the book **BUT** Some kids read only the books the teacher tells them to read.

6. Some students do extra projects because they learn about things that interest them **BUT** Some students do extra projects so they can get better grades or some reward.
### Student Motivational Orientation

**7.** Some students try on their own to find out things they want to know

**BUT** Some students wait to see if their questions are answered in class.

**8.** Some students like to read and study extra materials they are interested in

**BUT** Some students read and study mostly the materials they think will be on the test.

### Category: Independent Mastery v. Dependence on Teacher

**9.** When students get stuck on a problem, some keep trying to figure out their mistakes on their own

**BUT** Some students wait to ask the teacher for help.

**10.** Some students figure out their mistakes on their own

**BUT** Some students ask the teacher to explain their mistakes to them.

**11.** Some students finish their schoolwork independently

**BUT** Some students get the teacher to look at it first to make sure they are doing it right.

**12.** Some students like to figure things out themselves

**BUT** Some students ask a teacher in order to figure things out.

### Category: Independent Judgment v. Reliance on Teacher’s Judgment

**13.** Some students think they should have a say in what work they do

**BUT** Some students think the teacher should decide what work they do.
Some students prefer their own ideas or answers

BUT

Some students think that the teacher's ideas or answers are right.

Some students think that their own ideas are important

BUT

Some students think that the teacher's ideas or opinions are more important.

Some students learn about things that interest them

BUT

Some students learn about things the teacher thinks are important.

### Category: Internal Criteria v. External Criteria

Some students know whether or not they are doing well in school without grades

BUT

Some students need to have grades to know how well they are doing in school.

Some students know whether or not they have made mistakes without the teacher telling them

BUT

Some students need the teacher to tell them when they have made mistakes.

Some students know how well they have done on a project before the teacher tells them

BUT

Some students aren't sure how well they have done until the teacher tells them.

Some students know how much they have learned when they turn their work in

BUT

Some students aren't sure how much they have learned until they get their work back from the teacher.
### Category: Self-Confidence v. Helplessness

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<tr>
<td>21.</td>
<td>Some students think they can learn anything they want to</td>
<td>BUT</td>
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<td>22.</td>
<td>When students get back a grade that is lower than they like, some will work harder next time to show that they can do better</td>
<td>BUT</td>
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<td>23.</td>
<td>When students try to do something new and can't do it the first few times they try, some keep trying several more times</td>
<td>BUT</td>
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<tr>
<td>24.</td>
<td>When students get a good grade, some think it is because they worked hard</td>
<td>BUT</td>
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</tbody>
</table>
APPENDIX B: SURVEY AS GIVEN TO STUDENTS

Directions: Below are a list of 25 statements for you to respond to. Each statement has two parts, one on the left and one on the right. Read both parts of each statement. Decide which part is most like you. Then, using the scale below, decide how much that part of the statement describes you. Write the appropriate letter in the blank next to the part you chose. You should write a letter next to only one part of each statement. The other side should remain blank.

Example:
Some people like chocolate ice cream BUT Some people like strawberry ice cream.

1. Some students need to have grades to know how well they are doing in school BUT Some students know whether or not they are doing well in school without grades. ___

2. Some students like to go on to new work that is at a more difficult level BUT Some students would rather stick to the assignments that are pretty easy to do. ___

3. Some students think the teacher should decide what work they do BUT Some students think they should have a say in what work they do. ___

Student Motivational Orientation
| 4.  | When students get stuck on a problem, some keep trying to figure out their mistakes on their own | BUT Some students wait to ask the teacher for help. |
| 5.  | Some students think they can learn only the things that aren’t too hard to learn | BUT Some students think they can learn anything they want to. |
| 6.  | Some students prefer their own ideas or answers | BUT Some students think that the teacher’s ideas or answers are right. |
| 7.  | Some students figure out their mistakes on their own | BUT Some students ask the teacher to explain their mistakes to them. |
| 8.  | Some kids read only the books the teacher tells them to read | BUT Some students read extra books at home because they are interested in the subject of the book. |
| 9.  | Some students think it is fun to solve difficult problems | BUT Some students like to solve problems they already know how to solve. |
| 10. | Some students finish their schoolwork independently | BUT Some students get the teacher to look at it first to make sure they are doing it right. |
11. Some students do extra projects so they can get better grades or some reward
Some students do extra projects because they learn about things that interest them.

12. Some students need the teacher to tell them when they have made mistakes
Some students know whether or not they have made mistakes without the teacher telling them.

13. When students get back a grade that is lower than they like, some will work harder next time to show that they can do better
Some students will think that they can’t get a better grade and will do about the same amount of work next time.

14. Some students think that their own ideas are important
Some students think that the teacher’s ideas or opinions are more important.

15. When students try to do something new and can’t do it the first few times they try, some students give up because they don’t think they can do it
Some keep trying several more times.

16. Some students know how well they have done on a project before the teacher tells them
Some students aren’t sure how well they have done until the teacher tells them.
<table>
<thead>
<tr>
<th>Question</th>
<th>Student Motivational Orientation</th>
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<tbody>
<tr>
<td>17. Some students wait to see if their questions are answered in class</td>
<td>Some students try on their own to find out things they want to know.</td>
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<tr>
<td>18. Some students like to take classes that are hard</td>
<td>Some students prefer to take classes they know they will do well in.</td>
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<tr>
<td>19. Some students ask a teacher in order to figure things out</td>
<td>Some students like to figure things out themselves.</td>
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<tr>
<td>20. Some students like to read and study extra materials they are interested in</td>
<td>Some students read and study mostly the materials they think will be on the test.</td>
</tr>
<tr>
<td>21. Some students know how much they have learned when they turn their work in</td>
<td>Some students aren’t sure how much they have learned until they get their work back from the teacher.</td>
</tr>
<tr>
<td>22. When students get a good grade, some think it is because the teacher liked what they did</td>
<td>Some think it is because they worked hard.</td>
</tr>
<tr>
<td>23. Some students like to learn as much as they can, even by reading and studying materials that are hard</td>
<td>Some students like to learn what they can from materials that are easy to read and understand.</td>
</tr>
<tr>
<td>24. Some students learn about things that interest them</td>
<td>Some students learn about things the teacher thinks are important.</td>
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APPENDIX C
RESEARCH TOOL
PARENT LETTER
Dear Parents,

I am looking forward to having a successful and productive school year. The students will be actively participating in various projects and instructional programs. My educational leadership style is structured around flexibility, consistency and fairness. I continuously strive to make sure every child is learning and progressing throughout the year. In addition, I will be implementing a disciplinary action plan. The instructional foundation of the plan will be developed through extrinsic motivation. If you have any questions or concerns, please give me a call. (927-7161)

Sincerely,

Steven R. Howard
Biographical Data

<table>
<thead>
<tr>
<th>Name</th>
<th>Steven R. Howard</th>
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<tbody>
<tr>
<td>High School</td>
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<tr>
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<td>Jordan Road School</td>
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<td>Somers Point, NJ</td>
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