"Do I Have To?:
Best Practices in Using Reward Systems to Promote Achievement Motivation

By: Kevin Liang

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Department of Curriculum, Teaching and Learning
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Abstract

In an ideal classroom, all students would take a sincere interest in every topic introduced to them during the course of their education because they are inherently curious about an issue, they tend to take more responsibility for their own learning. However, this is an expectation unreasonable for anyone, especially young children. The challenge for teachers lie in motivating students to aim for achieving high expectations not only among the subjects they enjoy, but also among those that they do not. One such method employed by educators is an extrinsic motivation system, characterized by rewards, but there are mixed opinions about the effectiveness, benefits, and dangers of using such a system in theory. Through qualitative research, this project identifies the best practices that teachers should be mindful of if they choose to employ reward systems in their classrooms. These include goal setting, fluidity, salience, and relevance, and they ensure that the reward system maximizes the benefits while reducing or eliminating the risk of detrimental effects.
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TABLE OF CONTENTS

CHAPTER | PAGE
---|---
Chapter One: Introduction | 5
   Introduction to the Research Study | 5
   Purpose of the Study | 6
   Research Topic and Questions | 8
   Background of the Researcher | 9
   Overview | 10

Chapter Two: Issues, Ideas, and Previous Writing - Referencing the Literature | 12
   History | 12
   Overview of Key Issues | 13
   Defining Key Concepts for the Classroom | 14
   Theories and Perspectives | 16
   Common Ground and Disagreements | 20
   Extrinsic Reward Systems in the Classroom | 22

Chapter Three: Methodology | 26
   Participants | 26
   Procedure | 27
   Limitations | 28
   Ethical Review Procedures | 29

Chapter Four: Findings | 30
   A Variety of Reward System Styles | 30
   A Snapshot of Motivation among Primary and Junior Students | 31
   The Good, the Bad, and the Ugly | 36
   Not All Reward Systems were Created Equal | 41

Chapter Five: Discussion | 46
   Implications and Recommendations | 46
   Further Study | 50
   Conclusion | 52

References | 53
Appendix A | 55
Appendix B | 56
Introduction to the Research Study

While students in the primary grades often find classroom activities engaging and interesting, the general attitude surrounding the idea of school among North American children is negative, especially as they approach junior and intermediate levels of education. Tests often put stress on students, and homework is usually seen as insignificant busywork that takes time away from more preferable activities. Even when individual students genuinely enjoy school, they may feel pressured to conform to the idea promoted by their peers that academics in the classroom is boring. This negative view on academic achievement is a recurring and longstanding issue, despite sporadic messages that appear in media encouraging children to stay in school. Consequently, I believe that motivation for achievement in the classroom is an important issue for teachers to consider in their work.

The idea of building resilience in students against the negative stereotypes surrounding school is attractive to educators. Why do some students continually want to succeed in the classroom year after year, regardless of their teacher, while others do not? Undoubtedly, there are factors outside of the scope of a teacher's control, such as family situations, that can decrease student willingness to learn. However, it would be poor philosophy and practice to simply write off students as hopeless. Rather, it would be more appropriate to investigate what teachers can do with the limited amount of time they see students in the classroom to encourage academic achievement among disengaged students and continue to foster the love of learning in students
who are already motivated to succeed. One such approach that is frequently found in the
classroom is the use of extrinsic motivation techniques such as point systems to encourage and
reward engagement in activities that may not be inherently appealing to students. Thus, this
study will investigate the merits of using extrinsic motivation techniques in the form of reward
systems in the classroom and consider the benefits, dangers, and qualifying factors that influence
whether such a system will likely be successful or not.

Purpose of the Study

Using reward systems is a common practice among teachers in today’s classrooms, but it
is certainly not a recent development. North American research on the use of reward systems
dates back to at least forty years ago, suggesting that the practice has been around for even
longer (McMillan, 1973; Romeo, 1973). Because it is such a long-standing tradition in
education, it is worthwhile to closely evaluate the merits, pitfalls, and other qualifying factors
that surround this widespread system.

Reward systems are not as straightforward as they may appear to be. Simply categorizing
classrooms into those that use extrinsic motivation and those that do not, and comparing the
effectiveness of both is a gross oversimplification of the issue. The theory behind extrinsic
motivation is not inherently helpful or harmful to promoting academic achievement motivation.
In fact, previous research has shown that extrinsic motivation can be both helpful and harmful in
different situations. Rather, it is more crucial to consider how the theory is implemented in a
classroom setting. There are several factors to consider, including reward types and contingency
types. How these factors manifest in the practical application of reward systems can drastically
affect the student motivation for better or for worse. Depending on the manner in which reward
systems are used, teachers send positive or negative messages to their students that affect motivation, and it is often done unconsciously and unintentionally. Therefore, it is important for teachers to recognize the unintentional messages and be mindful of the consequences when using reward systems.

Similar to the concept of backwards lesson planning, teachers need to have a certain mindset or goal when implementing extrinsic motivation practices. Is it being used to encourage only academic achievement, as a tool for behaviour management, or a mix of both? Reward systems should be used as a stepping stone tool to building effective work habits rather than as bribery for students to finish an activity or worksheet. It should be designed to promote and sustain achievement motivation in the long term, rather than have the drive to succeed diminish in the absence of rewards. Furthermore, teachers must consciously and continually re-evaluate how their system is moving students along towards the end goals and adapt accordingly, rather than simply employing it as a survival toolkit to get through the year. With those goals in mind, I aim to explore what the most effective ways of using extrinsic motivation in a classroom setting are in order to encourage achievement motivation. Factors to be considered include reward types, reward contingencies, and individual and group systems, reward salience, and punishments.

In addition to the benefits, it is also important to acknowledge the potential dangers of using extrinsic motivation practices. As educators, we do not want to stifle intrinsic interest in any area or subject matter. Thus, we need to recognize how this may happen and actively work to ensure that intrinsic motivation is always fostered and never suppressed. By considering how certain factors move us towards or away from our goals in fostering achievement motivation among students, I aim to identify the best practices for implementing reward systems in the classroom consistent with educating for life-long learning.
**Research Topic and Questions**

The goal of my study is to tease apart the different components of reward systems and analyze how each component contributes to promoting achievement motivation or apathy. The end result will hopefully yield insight into how teachers can optimize achievement motivation among students through the use of reward systems. Additionally, I anticipate that this study will bring previously unconsidered background features of reward systems into the foreground so that teachers can thoughtfully design a reward structure that promotes a willingness to work and learn without compromising pre-existing intrinsic motivation.

The research process will be broken down into three main topics to be explored. The first addresses the issue of how achievement motivation is defined and measured. As will be further discussed in Chapter 2, academic achievement motivation can be a broad term, and to measure it requires a more explicit definition. It becomes further complicated when considering whether certain behaviors may truly constitute as demonstrating achievement motivation or not. Therefore, it is important to construct a definition of achievement motivation within the framework of a classroom setting, relevant to teachers’ goals for their students.

The second topic investigates the reasons of why students are or are not motivated to do well in school. More specifically, I aim to get a sense of what the most important factors that drive certain students to do well are. Subsequently, I intend to examine why other students are not as academically motivated as the others. Is it largely due to an absence of those motivating factors, or are there often ulterior reasons such as a fear of failure?

Lastly, the final topic takes a close look at how reward systems are actually implemented. Different features of reward systems will be analyzed, such as reward types and contingencies,
and the effectiveness of those systems will be evaluated. This will include determining what explicit goals teachers have when using reward systems, whether they are aware of the benefits and dangers of extrinsic motivation practices, and what aspects of their reward systems are consciously and deliberately planned. The ultimate objective will be to identify the features and best practices of reward systems for the classroom that successfully fosters intrinsic motivation while extrinsically motivating students in a positive manner when necessary.

Background of the Researcher

Having worked with children for over six years, it was an easy decision for me to pursue the Master of Teaching degree immediately following my undergraduate studies at the University of Toronto. I hold an Honours Bachelor of Science with a major in psychology, and I found that field of study particularly interesting. To be more precise, I specialized in cognitive and behavioural strands of psychology and encountered numerous experiments and theories that sought to explain why and how both humans and animals learned in certain manners. I wanted to bridge a connection between my studies in psychology with my research in the Master of Teaching program, and had a keen interest in explore this topic of behavioural and cognitive learning further because it could potentially have a significant impact in affecting my own, if not others', teaching practice.

I am primarily curious about the introduction of tangible rewards and the implementation of a reward system in the classroom. I recall during high school, one French teacher was able to reach a student who was particularly known for his absolute lack of concern for anything to do with school and education. Yet, she was able to motivate him to attend her class, engage him
during lessons, and as a result, even have him opt to continue to take French after the one required grade nine credit.

The main defining and unique feature of her class compared to the rest of the school was the presence of a reward system. She was an excellent teacher with strong overall pedagogical knowledge, and it would be foolish to attribute her success with this student solely to the reward system, but I am certain it played a role. At the same time, some research caution against the use of reward systems in learning due to unsustainability or potential long term detrimental impact. Yet, the bustle of a school environment is unlike any controlled research conditions and perhaps the findings cannot be generalized to reflect practical classroom application. Nonetheless, that French teacher inspired me to investigate the merits of using reward systems to motivate academic achievement in practical classroom environments, which is what I have chosen to narrow my topic down to explore.

Overview

Chapter 1 of my paper presents an introduction to the research project. It includes a brief overview on the issues of academic motivation in schools today, outlines the purpose of the research project along with the topics and questions to be addressed, and provides some background on how I came to choose this particular subject matter to explore. Chapter 2 focuses on an overview of both past and current issues and ideas relevant to the research project. It summarizes many of the theories that will serve as a framework for the research project and references literature that addresses some of the issues to be explored further in depth. Chapter 3 provides the context and methodology of the research project, including a description of the research participants, the approach for gathering information, the proposed interview plan and
questions, and the instruments used for collecting data. Chapter 4 describes the results of the findings for each research participant with respect to the different topic questions addressed in the research project. Lastly, Chapter 5 discusses the implications of the findings, limitations of the study, recommendations for practical application, and next steps to be addressed. A list of references and appendixes will be found at the end.
Chapter 2: ISSUES, IDEAS, AND PREVIOUS WRITING - REFERENCING THE LITERATURE

Everybody possesses a unique set of preferences, likes, and dislikes. It is unrealistic to assume that people can be sincerely interested in everything they encounter in their lives, and it would be foolish to expect students to live up to that same expectation. Ideally, students that are interested in a topic will inherently want to learn about it and consequently perform well. However, the real question lies in why some students can sustain that academic achievement motivation despite a lack of intrinsic interest, and more importantly, how we can foster that motivation in students who cannot. Because it is such a powerful influence, I believe that motivation for achievement in the classroom is an important issue for teachers to consider in their work. More specifically, I would like to explore techniques to foster and obstacles that decrease intrinsic motivation, in addition to the merits, drawbacks, and stipulations of extrinsic motivation practices in the classroom.

History

Even in the 1960s, classroom teachers have been using behaviour modification principles such as tangible reward systems as a form of classroom management (Grieger, 1970). The practice may have been prevalent in many classrooms by this time, but researchers began to look into its applicability in schools or academic settings during the 1970s, finding it an effective strategy for teachers to use (McMillan, 1973; Grieger, 1970). I found only one article written in the 1970s that warned against the use of reward systems in the classroom, but only as a group contingency system (Romeo, 1973). However, much of the research done during this period was one-dimensional and over-simplistic compared to our modern understandings of factors that influence extrinsic motivation. Even some studies performed in the 1990s shared the same
weaknesses of those conducted two decades earlier (Hellums & Davis, 1997; Friman & Carlyon, 1999). They often had much too broad definitions of achievement motivation that encompassed several distinct measures such as time spent on task, quality of performance, attendance figures, and rate of progress through material (McMillan, 1973). Similarly, the contingencies for which students were rewarded was too broad to be useful in today's classrooms, since they did not make discrete distinctions in their experiment designs and result analyses between mere participation, qualitative standards for work, and abstaining from certain behaviours (Williams & Stockdale, 2004; Grieger, 1970; Romeo, 1973). As a result, there were many mixed findings between studies, and often those findings were over-generalized. Thus, more modern research attempts to narrow down these factors among others to create a more insightful understanding of how teachers can foster intrinsic motivation and use extrinsic motivation in an effective manner.

**Overview of Key Issues**

As already mentioned, definitions are one of several key issues to be addressed. Defining motivation is the first step that must be taken before anything else can be addressed (Williams & Stockdale, 2004). Researchers and teachers must identify specific behaviours to represent what will constitute as academic motivation carefully. Furthermore, target goals must be set that will provide a useful construct for measuring academic motivation in a manner that is meaningful and applicable in the classroom for student academic habits and behaviours.

A second and third issue to be discussed are closely related. One of these issues are the psychological theories pertaining to intrinsic and extrinsic motivation. Two main streams that have input on this topic are behaviourists and cognitivists, with more specific theories such as operant, self-determination, cognitive evaluation, and organismic integration theories (Ryan & Deci, 2000). While both approaches agree on some common ground, there are disagreements
about the implications surrounding extrinsic motivation practices, which brings up the third main issue. Perhaps the largest key issue about reward systems focuses on whether it has detrimental effects on behaviours that were initially intrinsically motivated (Henderlong & Lepper, 2002; Akin-Little et al., 2004; Vansteenkiste & Lens, 2006; Williams & Stockdale, 2004). For example, if students that inherently enjoy reading are rewarded for doing so, they may be less intrinsically motivated to read in the future in the absence of tangible rewards.

A fourth and fifth issue that will be addressed relates to the practical application of intrinsic and extrinsic motivation in the classroom. Factors that encourage or hinder intrinsic motivation will be analyzed and applied to the context of a realistic classroom, drawing from the theories discussed earlier. The last issue will center around extrinsic motivational rewards. Many conditions and stipulations of rewards influence student reception to extrinsic motivation. Thus, the focus will be on reward types (verbal, tangible, etc.), reinforcement contingency types (success, performance, participation, etc.), and other factors that are conducive or detrimental to implementing extrinsic rewards systems successfully in a naturalistic classroom setting with academically relevant goals as opposed to a controlled lab setting.

**Defining Key Concepts for the Classroom**

*Academic motivation*

It is first useful to consider the definitions of concepts related to the topic of academic motivation in order to clearly outline what is stated without attaching additional meaning or assumptions that may not necessarily be true. This is a particularly important prerequisite to fully understanding the issues because a large amount of the mixed findings in the area can be attributed to undefined measures and over-generalized findings. First, Ryan and Deci described motivation as being "moved to do something" (2000). Thus, academic motivation can be said as
being moved to perform academically. However, teachers need to be explicit when considering the ultimate goal for increasing academic motivation. For example, time spent on task may be one measure used to qualify academic motivation. Yet, a student may increase the amount of time spent on a task without improving quality of work. Similarly, students may exhibit increased short term motivation through better work habits, but it is not sustained in the long term. Both of these situations could potentially be interpreted as increased academic motivation, but they would not be very useful to the teacher or student in an academic setting when the goal is to improve skills and build good lifelong work habits. Therefore, for the purpose of classroom teachers, I propose that the most useful construct of academic motivation in students is having an improvement or mastery goal in mind and putting forth the effort to meet that goal.

**Intrinsic and extrinsic motivation**

Student motivation for performing a given task may vary in two main ways. The first is the level of motivation, which simply refers to the amount or strength of the driving factor. The second is the quality of motivation, which a more complicated concept as researchers continually look at new influencing factors. The major two basic distinctions between quality of motivation are intrinsic and extrinsic motivation. Behaviours that are intrinsically motivated are performed for its inherent interest or enjoyment, rather than for separate consequences (Ryan & Deci, 2000; Vansteenkiste et al., 2006). That is, actions are done for its own sake, such as reading a book because the plot has captivated the reader. Extrinsic motivation, on the other hand, refers to motivation that stems from a source external to the self (Ryan & Deci, 2000; Williams & Stockdale, 2004). Common forms of extrinsic motivation are tangible rewards such as prizes, but one can be extrinsically motivated by intangible rewards as well, including praise or approval. Note that intrinsically motivated behaviours are ends in themselves, rather than means to a
separate end. Thus, previously deemed "grey areas" such as internalized work habits can now be definitely classified as either intrinsic or, in this case, extrinsic motivation. Extrinsic motivation can further be broken down to distinguish between these "grey" areas, but this issue will be addressed more in detail later on in the perspectives and theories section. Nonetheless, just because sources of motivation can be neatly defined as intrinsic or extrinsic, it does not mean every behaviour is either intrinsically or extrinsically motivated. On the contrary, behaviours are often motivated by multiple sources and it is likely that any given action is partially intrinsically and extrinsically motivated. One final note when considering quality of motivation is that although extrinsic and intrinsic motivation may seem to be polarized opposites on a continuum, they are not. Studies have shown that they are in fact two distinct measures. An increase in one does not necessarily require a correlating decrease in the other (Lepper et al., 2005).

Controlled and autonomous motivation

Another minor, but still useful classification of motivation quality that is worth defining is the dimension between autonomous and controlled motivation. According to Vansteenkiste and colleagues, "autonomous motivation involves the experience of volition and choice, whereas controlled motivation involves the experience of being pressured or coerced" (2006). While they appear to be synonymous with intrinsic and extrinsic motivation respectively, there are key distinctions. Intrinsic motivation and well-internalized forms of extrinsic motivation are considered autonomous, whereas poorly internalized forms of extrinsic motivation are considered controlled (Vansteenkiste et al., 2006).

Theories and Perspectives

There are two main camps of thought that weigh in on the issue of motivation - behaviourism and cognitivism. Behaviourists focus on how rewards can be used to increase task
engagement and performance even for reluctant learners. Meanwhile, cognitivists emphasize the
cognitive thinking processes that occur when making decisions about how to behave (Williams
& Stockdale, 2004). Logical reasoning is a large part of cognitive perspectives, occurring both
on a conscious and unconscious level. Both perspectives can be broken down further into more
specific theories. Within the context of motivation, behaviourists mainly follow B.F. Skinner's
operant theory, while cognitivists draw largely on Ryan and Deci's self-determination theory.

*Operant theory*

Operant theory suggests that all actions are motivated by rewards, but still acknowledges
the existence of extrinsic and intrinsic motivation. Of course, prizes or praise are prime examples
for extrinsic rewards as motivating behaviour. Operant theory also offers that students may be
intrinsically motivated when they engage in behaviours they enjoy because the reward is the
behaviour itself (Ryan & Deci, 2000). The emphasis in operant theory is on how rewards can be
used to modify behaviour to a manner that is conducive to learning but it neglects at least two
important issues. First, behaviourists tend to shy away from the long term applicability of such
practices, since the general consensus is that the target behaviour will slowly extinguish if
rewards are not given anymore. The second issue is specific to classroom settings. The reward
system may be successful at getting a student to engage in a behaviour such as spending more
time on math homework. But, it assumes that the more time a student spends on homework, the
more progress is made. This logic is intuitive and may often be true, but it is not always the case.
For example, if the level of difficulty is too high for a particular student, spending more time on
the homework will not help him or her understand the concepts any better without scaffolding.
**Self-determination theory**

Ryan and Deci introduced the self-determination theory in 1985, which had a main goal to "distinguish between types of motivation based on the different reasons or goals that give rise to an action" (Ryan & Deci, 2000). It is from this theory that the concepts of intrinsic and extrinsic motivation first came to light. However, as Ryan and Deci continued their work, they discovered that extrinsic motivation can be qualified, making use of the distinction between autonomous and controlled forms of motivation. Extrinsic motivation may represent impoverished forms of motivation, such as when one feels resented, unwilling, and externally forced into action. Conversely, it may also be represented in active and agentic states, such as those actions adopted with a sense of volition (Ryan & Deci, 2000). As educators, we acknowledge that every task may not be inherently enjoyable, but the hope is to use extrinsic motivation in a manner that students do not feel forced into performing a task, but act upon their own will to master whatever skill is being taught.

**Cognitive evaluation theory**

In order to further develop the idea of different levels of intrinsic motivation, cognitive evaluation theory was developed as a subset of the self-determination theory. It argues that "interpersonal events and structures (e.g., rewards, communications, feedback) that conduce toward feelings of competence during action can enhance intrinsic motivation for that action because they allow satisfaction of the basic psychological need for competence" (Ryan & Deci, 2000). Furthermore, competence must be accompanied with a sense of autonomy in order to enhance intrinsic motivation. This will have enormous implications for teachers reflecting on their own teaching practices. A large number of studies have found that when students are primarily motivated intrinsically, they perform much better academically than when their main
form of motivation is extrinsic (Williams & Stockdale, 2004; Hidi & Harackiewicz, 2000; Lepper et al., 2005). Unfortunately, it has also been shown that there is a decline in intrinsic motivation in students starting from the third grade onwards, even after controlling for the need to feel socially desirable (Lepper et al., 2005). By setting up positive learning environments and setting up academic tasks in a way that promotes competence and autonomy, teachers may be able to prevent the decline in intrinsic motivation, and even possibly work to enhance it with promising student academic achievement results.

**Organismic integration theory**

A second important subset of self-determination theory that focuses on the dissection of motivation into more precise categories is the organismic integration theory. This theory suggests there are three main states of motivation. On one end is amotivation, characterized by a perception of lacking rewards, relevance, and competence, as well as an impersonal locus of causality. On the other end is intrinsic motivation, described as having inherent interest, enjoyment, and satisfaction stemming from an internal source within the self. In the middle is extrinsic motivation, where it becomes more complicated but extremely relevant for teachers. Extrinsic motivation is broken down into four subtypes, called *external regulation, introjection, identification*, and *integration*. External regulation is a state where extrinsic rewards are very salient, and behaviours are performed to satisfy an external demand or obtain an externally imposed reward contingency (Ryan & Deci, 2000). Thus, it is experienced as controlled motivation, with an external cause of behaviour. Next, introjection refers to actions motivated by approval from the self or others, and is highly related to self-esteem. It is still experienced as external, but to a lesser degree. Identification is the next subtype of extrinsic motivation, which occurs when students have acknowledged the value of a goal or skill and consciously make the
effort to master it because they knows it will be useful in the future. In this case, the locus of causality is somewhat internal. The last form of extrinsic motivation is integration, which is the most autonomous form. Here, students completely accept and assimilate values into the self and internalizes the reasons for a particular action. Note that it is separate from intrinsic motivation because the drive still stems from a perceived functional purpose rather than the act itself.

Now that these differences have been made explicit, it is clear that ideally, students would be intrinsically motivated academically. However, it is unreasonable to expect any student to be inherently interested in every single task they come across during their academic career. Thus, teachers attempt to motivated students using external rewards, appealing to their sense of extrinsic motivation instead. This practice in itself is not necessarily good or bad. Rather, the results in the type of extrinsic motivation being achieved will be a better judge of how effective the practice is. Ideally, extrinsic reward systems should be implemented in a manner that encourages students to be motivated at the level of integration or at least identification. When reward systems cater towards promoting motivation at the external regulation or introjection level, the results are not desirable for the classroom because the target actions and goals will not be sustainable nor useful to the students with that sort of framed mindset.

Common Ground and Disagreements

Armed with a rather in-depth understanding of the leading theories in motivation, we can now move on to an overview of literature that directly concerns teachers and students in an academic context. Both behaviorists and cognitivists agree that students learn best when they are intrinsically motivated, and that a sense of both competence and autonomy can be used to enhance intrinsic motivation. Furthermore, both sides also agree that extrinsic motivation may be useful in persuading students to undertake an activity that they otherwise would not have
(Williams & Stockdale, 2004). However, there is a large debate on whether students should be given extrinsic motivation for activities because there is a risk that it will decrease any amount of intrinsic motivation they originally had.

One position states that providing extrinsic motivation for an activity will be detrimental to the intrinsic motivation for that activity, producing what is called an over-justification effect (Akin-Little et al., 2004). For example, a student who intrinsically enjoys reading may be given chocolate as an external reward for reading. Therefore, the student begins to see himself as reading partially for enjoyment, but also now for chocolate. When that student is no longer rewarded with chocolate for reading, he loses a reason to read, and becomes less motivated overall to do so. Indeed, a study on the correlation of the intrinsic and extrinsic motivation relationship demonstrated that attending only to extrinsic constraints and incentives (i.e. external regulation of cognitive evaluation theory) substantially undermined intrinsic interest or learning (Lepper et al., 2005). There is a second theory on why extrinsic motivation may decrease intrinsic motivation. In cases where actions are rewarded with unattractive rewards, an undermining effect occurs. Because the reward is undesirable, it sends the message that the activity is "trivial and not worth doing in their own right" (Williams & Stockdale, 2004).

The opposing position claims that extrinsic motivation does not necessarily have negative effects on intrinsic motivation, and can be used to enhance it in some cases. That being said, there is no denying that the possibility of extrinsic motivation resulting in a decrease in intrinsic motivation exists. Rather, it claims that under different circumstances, it may produce negative, neutral, or positive influences on intrinsic motivation. One manner in which it may increase intrinsic motivation is by enticing students to attempt a task they were reluctant to try due to lack of confidence or interest, with the result of discovering that it is something they are quite capable
of doing and enjoy. Thus, it opens up avenues that students never would have thought of or dared to try. Nonetheless, advocates of this position believe introjected or integrated extrinsic motivation can, and should, be successfully implemented in the classroom. The question is how we can set up reward systems to promote that form of achievement motivation.

**Extrinsic Reward Systems in the Classroom**

As already demonstrated, extrinsic motivation is a deeper issue than it seems because it may undermine intrinsic motivation under certain conditions and promote it under others (Williams & Stockdale, 2004). However, it is worthwhile for all teachers have an understanding of extrinsic rewards because "many of the tasks that educators want their students to perform are not inherently interesting or enjoyable" and "knowing how to promote more active and volitional ... forms of extrinsic motivation becomes an essential strategy for successful teaching" (Ryan & Deci, 2000). Fortunately, modern literature is available that focuses on the specific caveats of extrinsic motivation practices that can make or break reward systems in the classroom.

**Reward type**

One such caveat is the type of reward offered. Rewards can be tangible or intangible, but it is most important to consider the effect that any particular rewards will have on students over the long run. Tangible rewards that are attractive to children such as sweets will often produce powerful, immediate effects, but "diminish post-rewards use of those skills" (Williams & Stockdale, 2004). For example, chocolate may motivate children to complete an assignment quickly, but does not lend itself in any way to sustaining the behaviour after the promise of rewards are removed. The reward is consumed and soon forgotten. Thus, the wanted behaviour is useful in the short term but does not promote long term effects after the promise of rewards ceases. On the other hand, extrinsic motivation may come from rewards that promote long term
maintenance of the target behaviour. Positive social feedback or unexpected rewards reinforce the current target behaviour, perhaps with less initial payoff, but it also gives the student a reason to make use of the mastered skills in the future. Therefore, "all rewards are not created equal with respect to their short-term and long-term effects on behaviour" (Williams & Stockdale, 2004). It would be hasty, however, to automatically and completely dismiss one type of reward as having no place in the classroom. There may very well be situations in which a teacher needs something accomplished without requiring long term maintenance, such as cleaning paint off desks. In these cases, tangible rewards may be an effective manner of accomplishing a task efficiently, which can be a potential strategy in any teacher's classroom management toolbox.

**Reward contingency**

Reward contingency refers to the schedule of reinforcement in extrinsic motivation. In other words, they are the conditions that need to be met in order for a student to obtain whatever rewards is being offered for an action. Williams and Stockdale claim that "the most critical reward dimension for preserving task performance is not the type of reward but rather the reward contingency" (2004). In their article, they reviewed studies that looked at the effectiveness of three main types of reward contingencies for sustaining task engagement after rewards cease. The first type is *participation contingency*, which rewards children for merely engaging in a task. The second type of reward contingency is *success contingency*, which offers a reward for meeting a qualitative standard of task performance. A third form is known as *performance contingency*. It is similar to success contingency schedules except that performance contingency explicitly lets students know beforehand that if they meet a certain standard they will be rewarded. Success contingency, on the other hand, makes no such statement prior to the task and merely rewards students if they have met that standard (Williams & Stockdale, 2004).
The general findings acknowledge that participation contingency are the most ineffective at maintaining target behaviours in post-task conditions where rewards are no longer given, whereas success and performance contingencies cause a greater likelihood for students to continue to engage in the set task even after rewards cease (Williams & Stockdale, 2004). It is useful to approach and analyze these results through a cognitive lens. Self-determination theory emphasizes the importance of two factors for promoting intrinsically motivated behaviour - competence and autonomy. Tasks that are implemented with any of the three reward contingencies can be undertaken by a student autonomously, motivated by the reward. However, success and performance contingencies give the student a sense of competence, whereas participation contingency does not. Thus, students will be more intrinsically motivated to continue engaging in the task even after rewards are discontinued if the reinforcement schedule was success or performance based. It is important to note, however, that as teachers we must be cautious in using performance-based contingencies to promote intrinsic interest in activities. The performance standard must be set so that all students have the potential to meet that standard and earn the reward. If the bar is set too high for some students, they will not experience the reward, be discouraged from engaging in the activity in the future, and it will detract from their sense of competence, ultimately having a detrimental effect on any initial intrinsic motivation.

**Group contingency systems**

In my experience, many teachers use group contingency in their external reward systems. Students are often members of a group team, sharing both their winnings and losses of points based on individual and team efforts. Romeo (1973) against the use of a group contingency system in the classroom for a number of factors. First, it creates a hostile classroom climate, which does not support a safe learning environment for students. Second, it models a principle of
injustice because students suffer punishment even when they did not misbehave themselves. Third, the teacher may lose control over the amount of punishment the misbehaving student receives when teammates take it upon themselves to distribute punishment through various methods such as taunts, threats, humiliation, or alienation. Last, but perhaps most importantly, classroom management is and should remain a responsibility of the teacher, not the students. By using group contingency systems, the teacher is inadvertently placing classroom management responsibilities on students by using the misbehaving child's teammates in an attempt to control behaviour. Romeo listed these potential dangers of group contingency systems in the 1970s, but they are still very much relevant in modern times. However, there can be positive benefits to group contingency systems, especially if the teacher uses it primarily as a tool for positive reinforcement rather than negative punishment. It may foster group work, social skills, and communication among team members. Thus, it is an area of interest for me to explore, with a focus on how group contingency systems affect the dynamic of achievement motivation with a consideration of all the various theories and factors that affect intrinsic and extrinsic motivation.
Chapter 3: METHODOLOGY

This research project was conceived and planned according to the guidelines set by the Master of Teaching program in the Ontario Institute of Studies in Education at the University of Toronto. As such, the intent of this project is not to aim for a quantitative collection and analysis of data. Rather, its purpose is to explore and draw on the expertise in a certain area of a small number of teachers in order to inform and develop my own teaching practice. The focus of this project has been changed and narrowed down numerous times according to pre-existing literature and suitable participant availability. The primary method of data collection is semi-structured interviews guided by a prescribed set of questions that were digitally recorded and later transcribed. The data was then reviewed on numerous occasions and analyzed for common themes and striking differences.

Participants

Because the project focuses only on a small sample of research participants, it was essential to identify and select candidates who have had an abundance of experience using reward systems in their teaching practices. This ensured richer discussions in the interviews as the candidates would have shown commitment to the use of reward systems, been able to reflect and articulate on what works, what does not, and why, and have had multiple opportunities to refine their systems accordingly. All research participants had at least seven years of teaching experience and were supporters of extrinsic motivational rewards, but their individual styles of implementation were varied. Additionally, they each had expertise in different stages of child and student development, which offered not only an in-depth look at their motivation techniques, but also an overall encompassing view on the potential effectiveness and disadvantages of reward systems within the primary and junior grade levels.
Procedure

The discussions of this research paper take into account an analysis of both the literature review and the collective findings from the interviews. All interviews were conducted by the researcher in a semi-structured format and lasted approximately forty to sixty minutes in length. In addition to handwritten notes, all interviews were also recorded digitally and fully transcribed. The research participants were given the choice to decide the timing and setting in which to conduct the interview, but all candidates opted to use their own classroom after school as the preferable location so that they could easily refer to various items or visuals they used.

The interviews were all based on the same core set of questions (Appendix A), which were partially formulated on the basis of the literature reviewed for the project. The prescribed question set was used mainly as a guideline to ensure that all topics were addressed, but the researcher allowed room to clarify and elaborate on answers. Subsequently, certain questions were not asked if the candidate had already given a detailed insight relevant to that question in response to another. Occasionally, the researcher was also asked to explain a question further and would be required to give an anecdotal example to put the given question into context. Lastly, the candidates were given an opportunity at the end of the interview to add any additional comments they felt were significant, relevant, and but had not been previously addressed.

After transcription, the records were carefully analyzed on numerous separate occasions. Common themes among the interviewees' responses emerged that were consistent with those present in the literature and were categorized appropriately. Likewise, prominent differences in opinions between the participants as well as the literature were noted. Information was analyzed with a focus on one specific issue during each review session. Therefore, the same information was thoroughly reviewed on multiple instances with a different perspective each time.
**Limitations**

This project was planned and carried out according to the guidelines set by the Master of Teaching program at the Ontario Institute of Studies in Education of the University of Toronto. The purpose of the project is meant to inform the practice of the researcher, and has the potential to be informative to other educators as well. However, it is important to know that the research project has a number of limitations that must be recognized.

The qualitative nature of interviews as the method of data collection leaves open the possibility for misinterpretation, although efforts to clarify and elaborate on answers to avoid this were made. Additionally, because the responses are in part based on the participants' opinions, traces of bias in the information may be unavoidable. The time consuming nature of personal interviews is another limitation that manifests in numerous ways. Questions and responses must be balanced so that they are meaningful and insightful, but kept brief enough at the risk of not having enough time to discuss all the topics set aside for each interview. Furthermore, it allowed for only a small number of candidates to be interviewed. These candidates work in a very specific school and neighbourhood environment that can be tremendously different to the learning environments of other teachers and students. While an effort was made to reach a range of teachers in different age groups in the primary and junior levels, findings are not meant to be generalizable or reproducible due to the small sample size and qualitative nature of the study.

The amount of available literature on overall extrinsic motivation and reward systems is vast and contains many mixed findings. To produce a comprehensive overview that represents the entire body of literature would be impossible. Thus, specific studies to review were carefully selected based on currency and relevancy, and may not be entirely representative of the overall collection of works available. On the other hand, literature on reward systems specifically in the
context of education and classroom application was more limited than in a general context. The studies available on this topic were mainly qualitative data based on small sample sizes themselves, and are thus susceptible to the same limitations mentioned above. Nonetheless, the information collected was overall rich and serves its purpose of informing the practice of the researcher.

**Ethical Review Procedures**

Participants were notified of and given a copy of a consent form prior to conducting the interview (Appendix B). The consent form was reviewed with each of the participants in its entirety before they signed off on it, and the researcher kept one copy for himself, leaving the second copy for the interviewees' own records. Explicit attention was drawn to the point on the consent form that the interviews would be digitally recorded, given their permission. Should they feel uncomfortable with it, their answers would be hand scribed instead, but none felt the need require such measures. The participants were also encouraged to ask any questions they may have at any point during the entire process, and were given contact information for the researcher, research supervisor, and course instructor. Additionally, all interviewees were assured that they would remain anonymous, and that a pseudonym would be used when referring to any of their ideas or statements. The participants were also informed before the interview that they could opt out of the project at any time if they desired, and request the researcher not to use any of the data collected from them. This information was again repeated at the end of the interview, making it clear that even after the interview has been completed, the researcher would respect their wishes to disregard any information gathered at any time they wished. Lastly, the participants were told they could request a copy of their interview's transcript, would be advised when the project was completed, and would be given a final copy of the project if they wished.
Chapter 4: FINDINGS

Two research participants were interviewed for the project. Both research participants were teachers currently working in schools within Ontario, and have had at least four full years of teaching experience. At the time of the interview, each candidate worked in a grade level so that together they provided a broad picture across the entire primary and junior spectrum. However, they also both had the opportunity to teach in a range of different grades from kindergarten to eighth grade, and spoke to some of their experiences outside of their current teaching grade level.

A Variety of Reward System Styles

Christine is a teacher who was in her seventh year and originally started out in junior and intermediate grades, but has recently been teaching grade one for three years. She incorporates a point system of reward into her classroom, where students are placed into different seating groups every month. They may earn or lose points, represented by popsicle sticks, for their groups, and at the end of each week, students are awarded a number of tickets based on the position their group finished in. Additionally, Christine may choose to reward students independently by giving them tickets individually. At the end of each week, Christine opens "store", which gives students a chance to trade in tickets for small prizes such as pencils or Silly Bandz. Students may also opt to save tickets for larger prizes that cost more than they have at the moment. Furthermore, Christine operates an additional but separate star system for a select couple of students who have additional needs to help them keep on track. These students may earn star stickers on a chart that is posted on their desk. Once the chart is filled, they may choose a reward from the store.
Harvey is a teacher in his eighth year who currently teaches a combined third and fourth grade class, but has had experience in almost every grade level except for kindergarten. He operates a horse-race reward system in which student groups are represented by a horse placed along a race track on top of the whiteboard at the front of the classroom. Each group may move forward or backwards, and students are rewarded with dollar store prizes if their group's horse is the first to reach the finish line. It usually takes about a month to finish one race, at which point the groups and horses are reset.

**A Snapshot of Motivation among Primary and Junior Students**

At the primary and early junior stages, students are not likely to be thinking about the grades they require to enter into the university of their choice. Rather, they are looking to be entertained, whether by the teacher, their peers, or even by themselves. Thus, intrinsic interest in an activity is perhaps the most powerful motivating factor for students to engage in a lesson, especially if they find it fun and interactive. However, both research participants distinguished three more common sources of externally driven motivation that they found played a critical role in the academic achievement motivation among kids. Furthermore, they identified similar constructs of defining and measuring motivation that they found particularly useful when implementing their individual reward systems.

*Parental and home influence is a double-edged sword*

Both Christine and Harvey immediately jumped to parental and home influence as the most prominent source of motivation for students to want to perform well academically. Christine mentions that background and upbringing is especially the main reason she thinks students are or are not motivated. She believes that "if the parents are very supportive then the
"DO I HAVE TO?"

kids are internally going to want to be motivated to do well and to please them because they've put up that standard" and also that, "it works on the flip side too. If they come from a broken home or if there's no one checking their agenda everyday or if they go to a babysitter and no one is checking in on their success at school, I don't think they're going to be motivated to do well". In this scenario, motivation stems from the implementation or lack thereof a routine, culture, or expectation for meeting high expectations. The students who have the bar set higher for them will rise to the challenge, but those who do not will fall victim to apathy.

Similar to Christine, Harvey stated that "in [his] school, the majority of students need to do well because of their parents. Very few students will want to do well because they will feel pride in knowing that they did well." Yet, he emphasized a very different focus from Christine, because he identified motivation as looking "like fear". He gave an example of a student who needed to do well because she would not be able to play video games anymore if she did not. So, the threat of punishment is a technique that parents in his classroom commonly utilize, rather than the setting of high expectations in more positive manners. He reiterates that for many students, they think, "I need to do well because of my parents, my parents, my parents", but this is not a healthy form of motivation. Therefore, he says that "on Parents' Night, I tell the parents to stop doing that to the kids, and I tell them flat out." Various cognitive and behaviourist theories of motivation both suggest that competence and autonomy are two requirements that are essential for the establishment and persistence of motivation. Yet, when parents push their children to excel, especially in skills that they have already mastered according to their grade level or in activities that they already enjoy, the essence of autonomy disappears. Thus, while parents and background can be one of the most positive motivating factors for academic achievement, it may also have detrimental effects on a student's motivation.
Competition makes the primary and junior world go round

A second, powerful feature driving the behaviour of students in primary and junior grade levels is the sense of competition that many of them feel among their peers with almost every aspect of their daily lives including those of the classroom. Harvey points out that students at this age are "competitive by nature," giving the example that "as soon as you give back a math test, they'll ask, 'What did you get? What did you get?' and shout out their mark". Christine found similar experiences among the boys of her class. She notes that,

They're very egocentric so they compare each other to their peers... It may just be this group, but especially with reading levels, they are nosy with what others are doing or reading. The girls can concentrate on their own thing, but the boys will constantly ask each other, 'What are you doing?' and other sorts of nosy things.

An overly competitive classroom is not the best learning environment for students, but teachers can certainly channel that inherent sense of competition among students into productive habits conducive to learning. Competitive-based reward systems are one way to do so, but it leaves teachers with the challenge of designing that system so it fosters learning positively instead of creating a stressful learning environment overly focused on competition.

Motivation extends beyond the academic scene

A third, surprising factor influencing academic achievement motivation that both Harvey and Christine uncovered was the presence or lack of extracurricular activities in a student's life. For Harvey, he noted that in past schools, motivation to do well in school came not so much from parents, but from things like athletics. To be able to stay on a team, students needed to maintain a certain average, and that served as their primary incentive to do well academically.
Christine mentioned activities outside the classroom as an influencing factor as well, but in different light. She states that, "if [students are] doing extracurriculars at home such as piano, then they know what success is and they want to do continue doing those things". The idea that students who have an idea of what success is in any type of activity or subject area is important to keep in mind for teachers, because it allows educators to thoughtfully scaffold instruction to meet the needs of students. Setting high expectations is important to push students beyond their zone of proximal development, but students must be able to meet interim goals and feel that success. This falls in line with the idea that both behaviourist and cognitivist theories agree on, suggesting that competence (or at least feelings of competence) is a necessary requirement for continuation of motivation on any given task.

**Framing motivation in a useful construct for teachers**

Academic achievement motivation can be a tricky concept to identify, measure, and overall use in the classroom. As noted in many previous research studies, academic motivation can look like many different forms, but not necessarily be an accurate measure of whether a student is actually motivated or not to do well. It is problematic to gauge academic motivation based purely over the grades they receive or even using a measure such as the amount of time spent on task, because it can be misleading. Christine and Harvey initially had some difficulty articulating what it looks like objectively, but both teachers did identify similar ways to frame motivation in a way that is useful for the teacher.

For Christine, motivation "has to do with attitude in how you get to that achievement". She speaks about a current student who came from a Montessori school, where they place much more of a focus on independence and self-assessment and choice on learning material. He
performed well in Montessori, but is less motivated to do anything in his new classroom because the curriculum is much more strictly defined. Thus, although he was doing well previously, he is disengaged from many of the lessons now, and is not motivated to work because the working environment is more homogenous.

Harvey's thoughts on what motivation looked like was quite comparable to what Christine stated. Similarly, he did not focus on the end grade or performance that students ultimately produced in their work. Rather, he valued attitude and class preparedness as indicators of academic achievement motivation. Through an anecdote, he spoke of his experiences with a current student who did not do anything for the entire first science unit. After speaking with the student and his mother, the next science unit revealed great change in that student's behaviour. Harvey recalled that, "he would be the first one in class, always putting his hand up to be quiet, and asking questions when he didn't know something". This student even created a test for himself to take, which he ultimately did not do well on. Although his academic performance itself did not increase dramatically, for Harvey, it is the attitude, preparedness, and willingness to learn exhibited in those behaviours that demonstrated a real motivation to achieve academically.

A second point Christine offered about using reward systems in the context of motivation is that it is best framed over time. Christine believed that,

*Motivation is different in September to what it is in the months following. Especially in months like January, I notice a different peak in independence because it's a learning skill too - to be motivated, to follow routines, to do well, and know what success criteria is to be successful. So I think it can be taught, motivated, or supported and you see a change definitely from September to what they can do in June.*
DO I HAVE TO?

It is important to her that motivation, along with the reward system implemented to support it, should not be a static entity with set expectations for the entire year. Rather, motivation can be supported and developed through reward systems, but it requires fluidity to adapt accordingly to the growing skills of students.

The Good, the Bad, and the Ugly

Isn't this bribery?

One of the main arguments that critics of reward systems in classrooms often employ is that offering rewards for students is akin to bribery or payment, which is not a message that we want to pass on to young children. Christine and Harvey both recognize the dilemma and admit that it can potentially take on that form. However, they both take care in their practices to ensure precautions, rules, and expectations are in place to work against that mentality in various ways.

One common sentiment shared between both Christine and Harvey is the necessity for teachers and students to know what the purpose of the reward system is, and making it explicit to students that rewards need to be earned. As Harvey stated, "[students] are not rewarded for doing the right thing, and [they] are not rewarded for doing what [they] should be doing". Likewise, Christine mentions that she "won't give them a star just because they came to school". She also asserts that some students will eventually "develop an entitlement mentality... They ask for [rewards] and they lose the perspective that they've earned it. They expect it, and think 'I did what you asked. Why am I not going to get [rewarded] in return?'". However, it is important to keep that perspective of merit and worth for both teachers and students. Harvey explains that when students begin to ask for points on his horse race for small tasks he already expects them to
do, he will ask them why the horse race even exists and they will respond that it is there to help them want to learn, be ready to learn, and move forward in their education.

Thus, Christine stresses the importance of fluidity in her reward system for motivation. As mentioned before, she strongly believes in the framing of motivation over time in order to help students constantly develop further, and structures her reward system around that idea of constantly setting next steps and setting new goals. According to Christine, "there needs to be motivation because they aren't doing something, and I need to give them motivation to help and guide them in order for them to do this. So if we're working towards that, then I can give them a reward because we were working towards them doing something". She gives an example of a current student in her class to illustrate the point.

*I won't give everybody a sticker chart. One child got a sticker chart because he cried everyday coming to school, so his motivation was that if he came to school with a positive attitude, which is a learning skill, I would give him a sticker and when he fills his sticker chart he would get to take it home and his mother would reward him for being brave. And now, it's changed because he doesn't cry anymore. Now, he earns stickers by getting a quick start on his work. There's still the motivation, but it's changing as he grows.*

It is important to note that she will not reward students for something they are already expected to do, but for achieving next steps, which are then revised. Consequently, her reward systems are also restructured to reflect those changes in new goals. The point of reward systems are not act as a form of payment or bribery for students in completing tasks, and so always need to be framed in a manner that is a fluid, ever-changing tool to help move students forward, whatever those next steps are.
No merit behind controversy in a practical primary or junior classroom

Another idea that critics of the reward system often cite is that they are not sustainable and can even have detrimental long term effects on behaviours that are already intrinsically motivated. Supposedly, if students inherently enjoy an activity such as reading, rewarding them for every book they read will cause the student to read mainly for the reward rather than for the love of it. Thus, when the rewards are withdrawn, the student will no longer see any point to reading anymore. While this makes sense theoretically in controlled conditions, Christine and Harvey do not see this occurring in the practical classroom at all, at least with children up to junior levels.

Harvey states, "I can't speak for all ages... I think with the younger kids, they're just happy to get something and they don't necessarily look at it as a reward. I don't know if it would change their love of reading, to use that example". Instead, when there is a noticeable decrease in intrinsic motivation for an activity, he finds that it usually is because a parent has started to push the child more vigourously to perform and improve with that task.

Christine's responses affirms Harvey's opinions as well. When asked about the potential effects about having a reward system in one class but not the next, she responds, "I think the kids associate it with the teacher, like behaviour expectations. They think I'm in so and so's classroom and this is what happens. And because they're so young, I think they forget but can be re-taught or re-motivated". She recalls the story of a boy who loved to read and read at a high level for his grade. However, his mother has begun to push reading on him, forcing him to read more often and telling him that he's quite good at it so he needs to do it more. Unfortunately, in Christine's opinion, this has caused an newfound aversion to reading in that student. So, she believes that "if
[students] love to do something and they can do it well and have mastered it, then let them choose what they want to do with that”. Of course, if students are not performing at the level they need to and also have no intrinsic motivation to work at it, then that is when teachers need to push them a little harder and find out what it is they need to master the skill.

**Classroom management is important too!**

The biggest challenge of this research project was finding a way to implement reward systems solely for motivating children to perform well academically. While the findings did not quite reflect a solution to that challenge, they goals and reasoning around reward systems that the teachers articulated were very insightful. Both Harvey and Christine admitted to using their reward systems in a manner that did not directly focus on academic achievement motivation. In fact, both teachers explicitly explained that their reward systems were used only in the context of classroom management, behaviour management, and learning skills, and never for directly motivating students to perform high academically. They use it for management more because they find it more responsive and get more utility out using it to motivate students to be ready and prepared to learn.

Christine believes that in the primary level, the students are so young that they don't really understand the meaning behind a level three or four, other than that it is good. It doesn't make much sense to motivate them to achieve high academically because she notes that "these students take home their report card, but they don't really see it. Their parents read it. As much as we talk about success criteria, learning criteria, and reflecting on themselves, it doesn't really mean anything because next year they know they're going to be in grade 2". Instead, it is more productive to build those positive attitudes, self-behaviour management, and overall learning
"DO I HAVE TO?"

skills because these will indirectly translate into better academic performance for students who develop those skills.

Similarly, Harvey maintains that goal for his horse race is to motivate his students to be ready for class. The reward system "is intended to motivate them to be ready for class. They do it first thing in the morning, for clean up, when I'm at the front of the room getting ready to speak, and for transitions". He explains, that "for me, it's about being productive, which means they will learn more. I have an agenda, and I have to get through it during the day". Like Christine, he employs the specifically reward system as a tool of classroom and behaviour management, but keeps in mind the end goal of having a trickle-down effect that ultimately promotes academic achievement.

**The challenge of fostering academic achievement motivation**

As pointed out earlier, reward systems are rarely used directly in relation to fostering motivation for high academic achievement in favour of promoting learning skills that will indirectly translate to performance motivation. When Harvey or Christine wants to draw students' attention to their own good work, there was a common theme of using praise or stickers independent of the reward system already in place. Harvey mentions that he emphasizes "getting a C is great if you're used to getting Ds" but also that he will "never give a reward for getting a certain grade". Christine believes that it is enough to "just praise that they're doing a very good job and [tell them] that we're going to send it home - that sort of thing". This reluctance to bring in the competitive nature of the reward systems when focusing directly on their academic achievement was an unexpected but salient common theme between both interview participants. When asked to elaborate, they explained that every student has different goals, achieves at
different levels, and has a different set of next steps. Bringing in rewards based on competition may cause students to lose sight of what is really important in their education, and is unnecessary because students like to hear praise and receive small non-competitive rewards such as stickers anyway. Saving the use of the competitive rewards system for learning skills, attitude, and class preparedness places all students on even footing because they all have the potential to earn those rewards while attending to their sense of equality without needing to explain or justify equitability to them.

**Not all Reward Systems were Created Equal**

Through the interviewees' description of their reward systems and their elaborations on small details concerning the execution of those systems, it is clear that teachers must be thoughtful when designing their form of extrinsic motivation for learning skills in the classroom in order for it to be successful. Christine and Harvey both revealed detailed rationalizations regarding the intricacies of their reward systems, but both touched on four common points they felt were most significant and essential to the successful operation of their respective systems, including goal setting, maintaining control, being open and explicit to the students, and choosing potential rewards carefully.

**Don't lose sight of your goals**

The first step to setting up a reward system is nothing special for good educators who practice reflective teaching. Both interview candidates had clear goals in mind regarding their reward systems. Harvey was adamant that the horse race should be used to promote class preparedness, positive attitude, and overall readiness to learn, while Christine was focused on using her points system for classroom and behaviour management, along with learning skills to
promote positive learning environments. She also had a very specific purpose for her separate star system, moving individual students along in learning skills and changing that system to reflect the progression of skills in those students.

**Maintain control over your system of reward while giving students autonomy**

Christine and Harvey also both emphasized the idea of control in a number of ways. First, the reward system needs to remain a tool that the teacher can use to encourage learning in the classroom. As soon as the teacher loses control over the reward system, and the students or system dictates the pace and environment of the classroom, then the whole premise of promoting motivation becomes lost with such a perspective. Christine recognizes that competition is potentially a driving force in learning that can be tapped into as long as control is maintained. When describing her reward system she says that

*It’s a little competition for them to work towards and it’s something that I have control over because I can change it as I see fit and it’s individual or it’s group. It also gives the students a little something that they have control over too with their tickets and they can decide on what they want to do with them.*

Interestingly, she sees the angles of control from both a teacher perspective as well as a student perspective. She recognizes the value of giving students some control as well in the form of decision making. Not only do students have control over their own behaviour which reflects their receipt of rewards, but they also have control over how to spend those tickets that they do earn.

Both Christine and Harvey's primary reward system is based on a group contingency system, where students earn or lose points as a group. Previous ideas emphasize the dangers of
group contingency systems, stating that it takes the jurisdiction of consequences away from the teacher and places it into the hands of other students, effectively reducing the control teachers have over the amount of consequences a student faces (Romeo, 1973). Christine sidesteps the situation by changing the groups frequently, giving them some choice on who they want to sit in a group with, and using the group contingency system only as a means to earn individual tickets. Thus, the group points themselves are only a means to earn individual tickets, which students are also able to earn independently through other behaviours. Nonetheless, she states that although students may begin to blame each other for losing points, she is often able to twist it around and change their outlook on the situation. She will "twist it around and say 'I know you have this person in your group but you really need to help everyone in your group now matter who is in your group'. And some of the girls are very empathetic and they want to help that person in their group".

Harvey recognizes that students will turn to each other and hold each other accountable in group-contingent scenarios and actually adapts his reward system around this fact. He explains that most students will want to improve their behaviour and tend to their responsibilities when they know others are depending on them. However, he takes the responsibility of monitoring the effectiveness of his reward system and gauging whether it is accomplishing what he wants it to, and if any students are being negatively affected by its presence in the classroom. If he feels that group members are placing too much stress on one particular student who needs extra help, he will immediately step in and call it off and follow up with a reminder on why there is a horse race in the classroom to begin with. Harvey emphasizes that it is not always easy to do, but it is of utmost importance to build up the type of rapport as a teacher that allows you to do it right from the beginning of the year.
Spread the word!

A third significant element of any successful reward system falls in line with good assessment and feedback practices. Evident in Harvey and Christine's reward systems were the consistent verbal or written acknowledgements of why certain groups or individuals earned points or tickets. Christine explains that similar to issuing negative consequences, students must be aware of why they are being rewarded for it to be effective. Especially at the younger grades, the salience of reward systems is one of the most powerful designs a teacher can implement. Harvey places the horse race in a very visible area, above the whiteboard at the front centre location of the classroom, while Christine places popsicle sticks into group pockets as visual indicators of the students' groups' statuses. Furthermore, Christine makes it explicitly known to students when looking for a certain requirement in order to earn points. She explains that she "with these guys, you need to say it up front with that incentive because it's instant to them. They can see the points going in, and they can see the tickets going in. Yeah, it's very instant for them and that's what they want" and that "I think it's effective because when I count down and say there will be tickets, they scurry and move quickly. There's a change from just, 'Clean up!' to 'Clean up and I'm going to give groups points'."

Thinking outside the box with types of rewards

If asked to visualize what a reward system looks like, people may perhaps automatically picture tangible rewards in the equation such as stickers, pencils, or even candy. Indeed, tangible rewards are likely the most common form of reward that teachers will give in their classroom, aside from praise. However, there are at least two disadvantages that Harvey and Christine identified when talking about potential difficulties that they have encountered in their past
teaching experiences that concern the use of strictly sticking to tangible rewards when implementing their own personal systems.

The first obvious downfall to tangible rewards is the personal cost to maintain a supply of rewards that offer choice to the students. Harvey explains that it can be a financial burden as well as a burden on a teachers’ personal time, as they will need to go out and purchase the prizes themselves. The second potential pitfall to tangible rewards is finding items that appeal to every student in the classroom, and making sure the prizes do not get stale. Student will hardly be extrinsically motivated if they are not interested in the rewards that a teacher has to offer.

However, Harvey and Christine both mentioned that while they do personally put a heavier focus on tangible rewards, they have heard of or used alternative forms of rewards in the past that can prove to be quite effective. Christine points out that,

You won't be able to buy everything that they're going to want even though you try to open up to what fits them. But, you could open it up to something like picking anything from a book order. I've seen some teachers offer gym time or that sort of thing tailored to that student and he would eat that up.

Similarly, Harvey declares, "you find different reasons to reward different people. For example, I went to the peace treaty conference, and I had to choose six students from grade four. You find different ways to reward different people, and different things motivate different people." By opening up to the possibilities outside the realm of tangible rewards, teachers can offer something unique to students that will motivate them more than stickers or pencils will. It is simply a matter of knowing what matters and is relevant to your students, which is critical in good teaching to begin with.
Chapter 5: DISCUSSION

Explicit from current literature review and implicit in the findings of this research project, competence and autonomy are two recurring themes that are suggested to be crucial for building and sustaining motivation in any area, including academic achievement. Motivation to perform is one of the driving factors that teachers often question why some students seem to have it while others do not. It certainly plays an important role with respect to effective student learning and productivity, but the golden question for all teachers to ask themselves is, "How do I ensure competence and autonomy are present in my students' lives in order to promote motivation?". Modern teaching practices already cater to these elements, even if teachers who employ those practices do not realize it. Scaffolding instruction seeks to give students a taste of success and competence as they gradually build up their skills in an area. Emphasizing choice in many aspects of student-centered learning, from reading material to behavioural consequences meet the requirements of autonomy. Implementing reward systems in the classroom can prove to be an effective teaching tool, similar to the examples listed above, as long as teachers are thoughtful and reflective in designing their reward structure with elements of competence and autonomy in mind.

Implications and Recommendations

Communication with parents is critical

Parents are a constantly present factor in the world of education, so it does not come as a surprise when the research findings suggest they are most often the largest influencing variable concerning student motivation at the primary and junior level. However, because parental influence can prove to be both beneficial and detrimental, it is essential that teachers keep the
lines of communication open with them. Whether or not teachers plan to implement a reward system in your classroom, it would be advantageous to make clear to all parents at the beginning of the year your goals, plans, and vision of teaching. If parents are on the same page as the teacher, they will be more likely to be able to support that student's learning in positive ways and less likely to unknowingly interfere with the goal or process that teachers have set for a student. Of course, parents know their children quite well and will be able to give insight to the teacher about what is relevant and important to their children, so that teachers can incorporate that information if certain students require some motivation. Likewise, parents may also be able to follow through and support the teacher's processes at home. Teachers may also need to take the opportunity to advise parents not to push their children too hard if they have already mastered a skill. It can be a sticky issue to suggest the idea to parents, but they must recognize that if their children enjoy an activity and are able to do it well, praising and encouraging them to continue is wonderful. However, forcing them to perform that activity removes the element of autonomy, and their children are less likely to want to continue that activity, which is undesirable.

**Reward systems are best used for learning skills**

A central idea for teachers to remember when using reward systems is not to be overly ambitious with what you hope to accomplish with it. There is no shortage of critics when it comes to token economies, claiming issues of bribery or payment - and they can be valid if teachers are aiming to increase academic achievement motivation, because its source and validity can sometimes be misleading or difficult to gauge. In this sense, the focus is often on the end product or performance, and this is what students become fixated on. Getting to the end in order to obtain a reward is akin to payment, and that type of motivation is unsustainable in the long term.
Instead, teachers should be using reward systems as a means to a different end, not based on end products or marks, but on good learning skills, attitudes, and work habits. These skills increase productivity and become the foundation for a sustainable love for life-long learning that will continue even after the rewards are no longer present. These skills can be quite specific and can vary from getting a quick start on work, coming to every activity with an open mind and positive attitude, completing homework every day, and having clean desks before every lesson. However, they will quickly translate into valuable, general life skills such as responsibility, persistence, and open-mindedness. Not only does this approach set students up for the future, it is much easier to implement and structure than aiming for academic achievement motivation because the tasks that students are being rewarded for can be easily observed and accomplished. Yet, the effects will ultimately trickle down to promoting motivation for improving, learning, and moving forward.

**Best practices**

Not all classroom teachers opt to implement reward systems, and it is not at all an indicator of how well the teachers or students will perform. It is simply an aspect that may or may not be found in any given classroom, such as a class pet or a particular set of textbooks. However, if teachers are indeed considering implementing a reward system for their class, there are four key components that they should consider when designing their system. Moreover, teachers who already have a reward structure in place may find the following recommendations useful in reflecting on the effectiveness of their current system.

First, teachers must have a goal in mind for their reward system, and guarantee that it remains an integral part of it throughout the year. As discussed earlier, using it to promote and
build learning skills, work habits, and good attitudes is an effective, practical, and useful objective. Using it a reward system to encourage high grades or solely to reward and punish good and bad behaviour respectively is strongly discouraged against. It may be tempting to award extra points for achieving the highest mark on a test or completing the most number of math problems in a period, but teachers must refrain from mixing performance based accomplishments in the design of the reward structure, and give individual feedback or praise for it instead. Doing so will ensure the reward system's purpose is not compromised and students do not lose perspective of those goals as a result.

Second, reward systems should be designed to be fluid in goal setting. If the purpose is to build skills and habits, there should be evidence of improvement over time. The fluidity of such a structure is representative of scaffolding instruction for students in that short term objectives are set with an overall goal in mind. Once a class or individual student has met the current goals, next steps should be set and the reward system needs to change to reflect the new set of goals put in place for moving students along. This requires the teacher to be reflective, consistently assessing, and providing as well as receiving feedback on those student goals and is heavily dependent on the first requirement of a good reward system design.

The third key element is salience, and is an idea that teachers of younger students must especially be aware of. One way that reward systems should be salient is through the transparency of its structure to students. The purpose and goal setting process should be made explicit and include student input, much like success criteria for a lesson activity. Furthermore, when students earn or lose points, they should be told the reason why so that they know what they need to improve on or continue doing, similar to descriptive feedback. Reward systems should also be salient through its presence in the classroom. Visual indicators of group standings
or points should be strategically placed in highly visible areas such as classroom walls. Individualized forms of reward systems may include visuals that are taped onto student desks or other areas of "high traffic" for them. The salience of these visual representations of the reward system serves as a constant reminder of the learning goals they have set, and students are more prone to take it seriously when they can visually see points going into their group, whatever form it may take among different reward systems.

Lastly, teachers should thoughtfully plan out what the actual rewards will be. Above everything else, they need to be relevant and desired. Students who have no interest in the rewards will have less interest invested in the reward system, which undermines the entire function. In most cases, small dollar-store type prizes, pencils, or candy bars are sufficient for students because at a young age, most are glad to receive just about anything. However, in the event that a student is not interested in those tangible prizes, teachers can always be creative with potential rewards. In part, this requires knowing your students and communicating with parents, but some suggestions could include extra gym time, book order items, and opportunities to attend special events.

**Further Study**

The limitations of this study regarding the qualitative method, short time frame, intent of the research project, and scope of the current literature reviewed have already been addressed in Chapter 3. The thorough analysis of the interviews conducted revealed common themes and valuable insights into the areas of fostering academic achievement motivation and the use of reward systems. However, there were several shortcomings in the findings that raised some questions to be addressed in further studies.
Both interview candidates were currently employed at schools located in similar geographic locations that had similar demographics with regards to the types of students and families. Most of the families were of East-Asian descent and the students were generally the first generation to be born and raised in Canada. The families also ranged from lower-middle to upper-middle class, and not in any financial crisis situations. The interview candidates alluded to the idea that parental influence were strong motivating factors in students because of their background and the cultural expectations typically associated with East-Asian culture. Had the student body demographics been different, there may have been a different primary source of motivation in students. Thus, it would be worthwhile to investigate the effectiveness or approach of employing reward systems for academic motivation in a diverse range of schools.

A second area to be further explored that relates more directly to the implementation of reward systems is the contingency structure design. Both teacher participants had elements of group competition and group contingency in earning or losing reward systems. This may be done purposefully to hold students accountable for each other and build teamwork, but it is also a practical approach to keep reward systems manageable for teachers. However, it would be interesting to investigate the effectiveness of purely independent-based contingency systems. Individualized reward structures may allow for more precise differentiation between students and their goals, but possibly abandons messages that value teamwork and cooperation. It also has the potential to create overly competitive and isolated learning environments, which can induce unnecessary stress and turn the classroom into an unproductive, toxic setting. Nonetheless, these benefits and detrimental effects are merely speculations about possibilities that cannot be judged based solely on theory because practical application may reveal alternative influencing factors.
Conclusion

Although all classrooms ultimately serve the same purpose of educating students, they are individually unique, dynamic, and include a personal touch that reflects the teachers and their students. The idea of reward systems are simply another possible component that may or may not be found in classrooms, and is inherently neither good nor bad. However, if teachers do choose to implement a reward system in their classroom, they must be mindful of its purpose along with any potential benefits and drawbacks. This includes being knowledgeable about intrinsic and extrinsic forms of motivation, sources of motivation, and to some extent, recognizing the cognitive and behavioural theories surrounding motivation. This will be important not only to ensure that the design of the reward system promotes growth and development instead of apathy and regression, but also to justify elements of your own individual practice to parents or skeptics and critics of token economies. The benefits and detrimental effects of reward systems are documented in research, along with ideas surrounding competence, autonomy, and motivation so teachers who do want to use reward systems in their class are able to ensure they are well informed.

Undoubtedly, different teachers will have different priorities in their practice. It is easy for them to get lost in the countless expectations within the Ministry of Education curriculum. However, it is no secret that part of education consists of teaching the "hidden curriculum", including social skills, good work habits, and positive attitudes. No matter how teachers choose to do so, I believe that setting right tone and instilling an eagerness to learn within students should be among the top priorities for teachers. If students are motivated to learn, the rest will (almost) take care of itself because motivation leads to perseverance, which breeds success.
REFERENCES


APPENDIX A: Interview Questions

How do you define or measure achievement motivation? What does it look like when achievement motivation increases or decreases?

In your opinion, what do you think are the most common reasons that students are (or are not) motivated to perform well in school?

If a student is intrinsically motivated to perform a particular task, how do you foster that motivation?

What techniques do you use to combat the apparent decline in intrinsic motivation among students in older grades (if applicable)?

What is your understanding, thoughts, and opinions on using extrinsic motivation techniques?

Describe the reward or punishment system that you use in the classroom.
- Are the students being rewarded (positive) or punished (negative)? (E.g. points, strikes, etc.)
- Is the system implemented as an individual or group contingency?
- What are they being rewarded for? (e.g. completion of work, good behaviour, achieving a certain standard, etc.)
- What are they being punished for? (e.g. not completing work, poor behaviour, not achieving a certain standard, etc.)
- What real life applications do the reward or punishment systems translate into? (e.g. prizes, punishments, etc.)

What is the ultimate goal or intention that you have when using an extrinsic motivation system in your classroom?

How often do you use the reward system, and how important is it in your classroom culture?

How effective do you perceive extrinsic motivation techniques to be? What factors are important in determining the successful implementation of a rewards or punishment system?

What difficulties have you encountered previously in using the system?
Dear ________________,

I am a graduate student at OISE, University of Toronto, and am currently enrolled as a Master of Teaching candidate. I am studying the use of reward systems to promote learning skills for the purposes of investigating an educational topic as a major assignment for our program. I think that your knowledge and experience will provide insights into this topic.

I am writing a report on this study as a requirement of the Master of Teaching Program. My course instructor who is providing support for the process this year is Dr. Jackie Eldridge. My research supervisor is Dr. Clive Beck. The purpose of this requirement is to allow us to become familiar with a variety of ways to do research. My data collection consists of a 40 minute interview that will be tape-recorded. I would be grateful if you would allow me to interview you at a place and time convenient to you. I can conduct the interview at your office or workplace, in a public place, or anywhere else that you might prefer.

The contents of this interview will be used for my assignment, which will include a final paper, as well as informal presentations to my classmates and/or potentially at a conference or publication. I will not use your name or anything else that might identify you in my written work, oral presentations, or publications. This information remains confidential. The only people who will have access to my assignment work will be my research supervisor and my course instructor. You are free to change your mind at any time, and to withdraw even after you have consented to participate. You may decline to answer any specific questions. I will destroy the tape recording after the paper has been presented and/or published which may take up to five years after the data has been collected. There are no known risks or benefits to you for assisting in the project, and I will share with you a copy of my notes to ensure accuracy.

Please sign the attached form, if you agree to be interviewed. The second copy is for your records. Thank you very much for your help.

Yours Sincerely,

Kevin Liang

Researcher Name: Kevin Liang
Phone Number:
Email:

Research Supervisor's Name: Dr. Clive Beck
Phone Number:
Email:

Instructor's Name: Dr. Jackie Eldridge
Phone Number:
Email:
Consent Form

I acknowledge that the topic of this interview has been explained to me and that any questions that I have asked have been answered to my satisfaction. I understand that I can withdraw at any time without penalty.

I have read the letter provided to me by Kevin Liang and agree to participate in an interview for the purposes described.

Signature: ______________________________________

Name (printed): ____________________________________

Date: ____________________