**Group 14**

**Intrinsic and Extrinsic Motivation**

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**Section 1 – Definition of Theory**

For many years educators have studied motivation to discover the age-old question of how we motivate our students.  To be motivated means to be moved to do something.  It can be difficult as educators to motivate our students at times, but if properly educated on this subject it may become easier to accomplish.  Knowing what strategies work to help motivate our students, and also knowing what strategies cause our students to become unmotivated is a big step.  A person who is unmotivated feels no interest to act.  Motivation varies from person to person, and what may spark an interest in some students may not in others.  Students have different amounts, and also different kinds of motivation that drives them.  These different types of motivation affect a student’s attitude and goals that give interest in particular actions.  For example, a student who is motivated to complete classroom assignments out of interest or on the other hand to seek approval of the teacher or parents.   In this example the level of motivation may not vary, but the drive to be motivated does.

         Self-Determination Theory sheds light on different types of motivation.  The most debated is between intrinsic motivation, that motivates students to perform particular tasks out of self-interest or enjoyment, and extrinsic motivation, that motivates students to perform task because of outside rewards, that can be either verbal or physical.  Intrinsic motivation has been found to be the most important, because it enhances creativity and learning in students.  “This natural motivational tendency is a critical element in cognitive, social, and physical development because it is through acting on one’s inherent interest that one grows in knowledge and skills.” (Ryan, 56)  This means students will have a higher value of learning if they are interested in what is being taught.  A higher level of interest allows students to enjoy the material and thus gives them more motivation to complete it.  Activities that are intrinsically motivating are said to stimulate satisfaction of a persons psychological needs.  Although these interests come from within individuals it is not always the case that our students will be intrinsically motivated for every task.

         Intrinsic motivation is the most important aspect of motivation, but we also know that most activities we perform in life are not intrinsically motivating.  After childhood this becomes more evident because of our social demands.  As a student advances through grade levels it appears the intrinsic motivation becomes weaker.  This is where extrinsic motivation comes into play.  Extrinsic motivation comes from outside rewards when an activity is completed.  This conflicts with intrinsic motivation, because it is not done for the enjoyment and fulfillment of the task.  Extrinsic motivation varies in degree of autonomous results.  A student that does homework in fear of school or parental punishment is extrinsically motivated.  This outside influence makes the student extrinsically motivated because the completion of the homework is done to avoid punishment from school or parents.  On another side a student can be greatly involved in a certain subject because they believe it is valuable information and not because of interest or enjoyment.  Both of these examples show extrinsic motivation, but vary in the level of autonomy.  The second example brings in the personal choice of the student instead of the control from an outside source like the first example.

There is the constant debate over extrinsic or intrinsic motivation.  One wonders if extrinsic motivation can hinder intrinsic motivation.  Several studies have been done on this very subject and all seem to arrive at similar results.  Studies do show that extrinsic incentives can undermine previous intrinsic motivation.  A controversy also exists concerning which conditions extrinsic rewards and punishments will have positive or negative effects on intrinsic motivation.  “In fact, the experimental literature on over justification suggests that intrinsic and extrinsic motivation ought frequently coexist.” (Lepper, 273)  Studies show that an extrinsic reward that provides the student with information about their competence level in a certain activity or highlights their skill level in a particular subject can actually stimulate their intrinsic motivation.  This provides us with the understanding that verbal incentives will not hinder a student’s intrinsic motivation or interest.

It is important for educators to promote an environment that gives students a sense of control and self-determination.  These goals can be met by providing lessons that are meaningful and interesting.  Stressing the importance of learning goals, and giving our students age and skill appropriate material can be a solution to the problem.   Internalized motivation is also important because it focuses on students being able to understand their own goals and values.

It is very important to keep students intrinsically motivated.  If extrinsic incentives help build this motivation then teachers need to know how to do so appropriately.  Extrinsic motivation can help or hinder intrinsic motivation.  Educators must learn to incorporate extrinsic motivation that will in return spark interest and value in student’s education.  Students can be led to find the desire to be intrinsically motivated to do well in class and in life in general.  Student diversity both educationally, socially, and economically, makes it challenging to find strategies that will motivate students and awaken the intrinsic motivations within them.

 With this information in mind, it is clear that there are certain steps a teacher can take to ensure his or her students develop a healthy level of motivation.  Typically, both intrinsic and extrinsic motivation will have to be included in the classroom to some extent.  While intrinsic motivation is ultimately the type that students need in order to be life-long lovers of learning, extrinsic motivation is often equally necessary to encourage students to take the first steps in learning.  After all, not every subject is going to be interesting to every student.  This is especially true when a student is just starting out with a subject and can be easily intimidated by it’s challenges.  According to Lepper and Henderlong, having some form of extrinsic motivation--like a grade, teacher approval, etc.--can encourage students to do the work necessary for a class while opening themselves up for the possibility of eventually discovering an enjoyment that will lead to intrinsic motivation (p.266).

 While there are some obvious merits to using extrinsic motivation, teachers generally want to use those methods sparingly.  Research has shown that too much extrinsic motivation makes an activity a chore instead of an enjoyable project, decreasing the chances that an individual would ever do the activity on their own.  For example, in a study where students were given puzzles to work on without any reward, they would come back in their spare time to work on the puzzles again. However, when students were paid to work on puzzles, they almost never wanted to work on them at a time where they could not get paid to do so.  Lepper and Henderlong (2000) conclude that the extrinsic motivation killed the chances of developing intrinsic motivation in this case (p. 260).  This experiment and others like it force a teacher to be cautious before using extrinsic motivation alone in the classroom.  That being said, however, many teachers will find a healthy amount of extrinsic motivation will be necessary to get students interested.  For example, they have to come into a math classroom because they need the class to graduate--not necessarily because they really want to learn the subject.  After a while, however, students may start to see the value in the class and be motivated to come every day because they feel they are learning.  In fact, teaching students the long-term value of a course (technically a form of extrinsic motivation since they are expecting an eventual reward for their effort) can help them feel motivated.  Ryan and Deci (2000) explain that “students will more likely adopt and internalize a goal if they understand it and have the relevant skills to succeed at it” (p. 64).  For the information accessible and important is required for teachers to get students interested in succeeding.  For some students, though, there will never be an interest in some subjects.  In that case, they will need the extrinsic pressure of grades to do the work and learn the material that they will need later.  Having short-term goals, like grades and praise, can be just as important as long-term goals, like success in a future career, yet both are forms of extrinsic motivation that can help students find motivation to work hard in a class where the subject does not interest them for learning’s sake.

 Many experts actually feel like the best way to use extrinsic motivation is to apply it in a way that leads to intrinsic motivation.  For example, Lepper and Henderlong (2000) showed how students were much more intrinsically motivated in the end when their extrinsic motivation or reward was a chance to learn more (p. 267).  In this case, students were told that once they mastered easy math problems, they could try harder ones.  Since learning itself was the prize, the extrinsic motivation did not kill the students’ desires to learn.  In fact, they may have been more intrigued by math than usually because they wanted to feel privileged by being allowed to attempt a harder problem.

 Overall, however, researchers tend to agree that intrinsic motivation is the most positive type of motivation.  Having the inner drive to do something because it interests you on a personal level is key to succeeding in school and the “real world.”  Teachers can foster intrinsic motivation by creating a classroom environment where students feel like they have some degree of autonomy.  In fact having a sense of some autonomy may be the most important factor in encouraging students to work.  Hayenga and Corpus (2010) argue that students who were intrinsically motivated because of how much autonomy they had (referred to as high quality motivation) were more likely to perform well in school than students who were not given autonomy (p. 379).  According to Ryan and Deci (2000), even “feelings of competence will not enhance intrinsic motivation unless they are accompanied by a sense of autonomy” (p. 580).  In other words, even being good at a subject will not increase interest if students feel like they have no choice in their education. Being given choices concerning assignments and, when possible, subject matter is a good way to let students shape their own education.  As students pass through the grade levels, they start to lose their intrinsic motivation. This is partly because they are always aiming for extrinsic rewards (grades, parental approval), but Lepper and Henderlong (2000) also argue that this decline is partly because they start to see effort as being a sign that someone is less capable at the work (p. 280).  No student wants to look incapable, so they start to put in a minimum effort.  Because of this trend, teachers also need to push students to see that the minimum is not enough and that hard work is necessary even for the brightest students.  That way students will also be motivated to try as hard as they can to learn.

 There has also been considerable research that has suggested teacher enthusiasm can effect student intrinsic motivation.  After experimenting to see whether instructor attitudes could influence student interests, Patrick, Hisley, and Kempler (2000) concluded that “when a teacher exhibits greater evidence of enthusiasm, students are more likely to be interested, energetic, curious, and excited about learning” (p. 233).  Indeed, it stands to reason that students will believe their subject is interesting and important if the teacher approaches as such instead of as another chore to get through.  Enthusiasm is also contagious in other ways.  For example, just being exposed to someone who is very energetic can make other people feel more awake and excited. Pointing to previous research on the subject, Patrick, Hisley, and Kempler argue that there is an “emotional contagion, wherein a person can ‘catch’ emotions through interpersonal contact” (234).  With enthusiasm, a teacher can make their students feel mentally awake and excited about whatever the class is working on.

 A good teacher should always remember, though, that different cultures have different styles of motivation.  For example, Lepper, Corpus, and Iyengar (2005) found that “intrinsic motivation was maximized for Asian American children when choices were made for them by their mother or by a group of their peers but was maximized for European American children when they personally made their own choices” (p.186).  Extrinsic motivation, like parental approval, does not get them as far.  For Asian students, however, parental approval becomes the same as intrinsic motivation because the students are able to deeply include their parents wishes in their own.  What seems like extrinsic motivation in some cultures, then, can become intrinsic in others.  Teachers need to keep that in mind so that they can motivate every student on an individual level, giving each person the push they need intrinsically or extrinsically to succeed.

Most students will need a balance between intrinsic and extrinsic motivation to succeed in the classroom.  Finding the right combination of both types in order to help a student succeed is almost solely the responsibility of the teacher in the classroom.  Because of this, teachers need to first and foremost learn to understand each student in a classroom.  They also need to have a positive attitude about their students’ chances of success and the subject being discussed.  Finally, giving students a chance to make some of their own decisions (even if their decision is ultimately to have someone else decide) will allow all students of all cultures a chance be satisfied with what is being asked of them.  By understanding these types of motivation and effectively using both in the classroom, students can create an atmosphere that inspires learning at school and keeps students thinking outside of it.

**Section 2 – Analysis of Calvin**



The magic of “Calvin and Hobbs” is its ability to teach as well as entertain.  Written and illustrated by cartoonist Bill Watterson in the mid-1980s and 1990s, the strip depicts the adventures of an overly imaginative six-year old boy named Calvin and his stuffed tiger Hobbes.  Through humor and narrative, Watterson explores issues important to most American’s through the eyes of Calvin, and the adventures explored never leave the reader without a smile.

         In the example shown above, Calvin tells his dad a plan to be better motivated to succeed in school.  Calvin makes the argument that if he were rewarded money for grades he would have a reason to strive to do better academically.  He asks $1.00 for ever “D,” $5 for every “C,” $10 for every “B” and $50 for every A.  Of course, Calvin’s dad is not so enthusiastic. Refusing to “bribe” his son, he tells Calvin that he should do well in school for his own good, because having an education is good for its own sake.  Calvin’s response shows his disappointment, but it also shows his true lack of motivation.  He had hoped to make an easy four bucks, meaning he had hoped to receive one dollar for each of his four “Ds,” not at all a lofty goal by any definition.

         From this comic strip a reader well versed in psychology can tell many things about Calvin’s motivational pattern.  He is very clearly extrinsically motivated by money, requesting payment in exchange for grades, while his father hopes he will become intrinsically motivated to study for the sake of becoming educated.  Knowing Calvin, such a change in motivation would be highly unlikely, because the desire to study hard is simply not a part of his personality.  Even his extrinsic motivation lacks effectiveness, as can be seen in the last frame of this strip.  Had Calvin received payment from his father for the grades he received, he recognizes that he still would have only made four dollars, one for each “D.”  Even with the potential to earn more, up to $200 for straight “As,” Calvin only wanted compensation for the work he was already doing rather than extra work he could do.

         This leaves the reader wondering exactly what Watterson was trying to say about society through his comic.  Several statements can be taken from Calvin’s attitude in his interaction with his father, and it is safe to say that Watterson intended to attack misguided cultural norms through his humor.  For example, Calvin’s request of money as compensation for grades mirrors today’s cultural expectations of handouts.  Whether from the government, private institutions, or individuals, handouts are all too often expected by an increasing percentage of the American population.  People expect more and more to be given them for free, and they are unwilling to work any harder for their increasing rewards.  It is likely that this is a phenomenon that has increased over time, making what was once rare and appreciated now common and required.  Some, like Calvin, are unwilling to work without the promise of some unrealistic and undeserved reward, and the impact of this expectation on what is considered “normal” in American culture is great.

         This “Calvin and Hobbes” strip goes on to show how materialism often outweighs knowledge and wisdom as a valuable asset.  In America today, people are motivated by money because money can buy you stuff.  Whether it is a bigger house, a newer car, or a flatter TV, the American dream has become a dream of appearances, and people have sacrificed their love of knowledge and wisdom for a love of stuff.  When faced with the choice of a job that is intrinsically beneficial or a job that is extrinsically attractive, many people will take the job that brings them higher up the social-economic ladder, closer to an unrelenting ideal that is never satisfied.

         Watterson also attacks short sighted goals through Calvin’s request of payment for grades.  Whereas grades indicate a measure of academic achievement, money is gained and spent, often in a way that brings short-term entertainment rather than long-term opportunity.  This can especially be seen from the spending habits of a six-year old like Calvin.  It can be implied that Calvin does not care about long-term goals when compared with the satisfaction he would receive with enough money to play games at an arcade or buy a candy bar at the store.  Over time, such an attitude leaves people living only for themselves, with no greater aspirations than keeping happily entertained.

         A final lesson gleaned from Calvin’s extrinsic motivation is his lack of concern for the application of abstract concepts to real life.  Calvin does not seem to realize why school is important and why grades should make a difference.  He seems unable to connect grades with opportunities, and this disconnect leaves him without the desire to work hard enough to achieve.  Here, Calvin needs to understand the intrinsic benefits of being educated and be motivated by the fact that good grades can make for greater opportunities to grow as a person.  The extrinsic benefits of money does not compare, and Calvin needs to make this connection, seeing how school makes a difference in real life.

         Like much of American society today, the reason for Calvin’s extrinsic motivation pattern is that he expects handouts, he values materialism above knowledge and wisdom, he has short-sighted goals, and he is unable to connect abstract ideas with real life.  This highlights the problem with only being motivated extrinsically, showing that without intrinsic motivation a behavior will only go on as long as it benefits an individual through some outward reward.

         In order to combat this problem in the classroom, teachers need to always make sure that intrinsic motivation is highly regarded, giving students reasons why their education matters to their growth as a person, even when extrinsic motivation may also be present.  Extrinsic motivation is not bad in and of itself, and in fact is often quite helpful, but without the addition of intrinsic motivation it will leave students behaving like Calvin, working only for the outward reward rather than for their own personal growth.  Therefore, teachers must be quick to explain answers to the questions of “why?” and they must be able to communicate reasons for tasks effectively.  This is all a part of having well planned curriculum that is presented in way that impacts the students on a personal level, helping them to relate to the information and understand its relevance.

         Perhaps the most efficient method for doing this is for teachers to adapt a student centered teaching philosophy.  When the students are held in top priority, teachers will go above and beyond to make the curriculum relevant to their interests.  Then, when new material is presented students will have a desire to learn for the sake of learning, not because they need some extrinsic motivator to spur them on.  In order to do this effectively, teachers will be forced to put in extra effort, because making curriculum relevant is not always as easy as it sounds.  Great attention to the interests of individual students will be required, and flexibility will be essential as lessons evolve.  A good teacher will spend time reflecting on the effectiveness of the instruction, making changes all the time in order to improve.  They will think outside-the-box, and encourage their students to do the same.  This attention to the student, while time-consuming, is extremely important, and teachers will need to stay encouraged by the fact that intrinsic motivation will increase.  It would most likely be easier to sit a reward in front of the students and tell them to perform a task in exchange, but a long-term approach would mean more for the student and yield much greater results.

         Along with the student centered teaching philosophy, the best way to motivate students intrinsically comes from a love of the subject and an enthusiasm for the material on behalf of the teacher.  Students will conform to their environment, and teachers who are excited about learning will have a tremendous impact by spreading that excitement.  On the other hand, when a teacher loses his or her excitement, often the classroom environment becomes monotonous.  Students sit in the same place day after day, listening to the same style of teaching (usually lectures), and doing whatever they can to “succeed” in a class that means nothing to them.  Teachers in such a rut become blind to their individual student’s learning styles, and in doing so cut the students opportunities to become exceptional.  Achieving the minimum becomes normal, and the goal of education becomes passing standardized testing or receiving ambiguous letter grades rather than becoming equipped to impact the world.

         From this simple “Calvin and Hobbs” comic strip, it is easy to see that Bill Watterson takes his humor beyond the experiences of a six-year old boy and his stuffed tiger to the complex world of human psychology.  Specifically, this strip pokes fun at the ease in which people are motivated to do things for all the wrong reasons.    Calvin values the extrinsic motivation of money above the intrinsic motivation of learning, and sooner or later such thinking will catch up not only with Calvin, but more importantly with American society as a whole.

**Section 3 – Hot Topic**

We have all experienced within an educational classroom.  Whether it was from attending one as a student, to teaching in one, there are several different things we can take away for those experiences. Of Course, we can usually remember a certain school lunch or activity such as recess.  Many may remember a specific event such as a football game or annual field trip.  But I am sure we can all remember one specific aspect of the classroom itself; the teacher.  Through their words and style of conveying information, teachers have the ability to influence students long after they leave the classroom.  Many people are known to still do activities such as reading and mathematics the way they were first taught to.  Another major influence teachers have on their students are the way they approach classroom motivation.  We often see this characteristic carry through life longer than many other skills.  Here inlays an argument that is still present today.  Through using motivation sometimes students are being, what a lot of people see, as bribed.  What we are going to look at is whether bribing students with diverse learning styles is effective and what may be some alternate techniques to this question.

 As we have discussed before within motivation there are two major realms that are present.  Here we see both intrinsic and extrinsic motivation.  Both are used within the classroom.  Many educators and psychologists today think that the use of extrinsic motivators in the classroom may be harmful to the student.  Recently there has been a push for students to aim for more self-motivation and to partake in learning, for learning's’ sake but many experts still see relevance in using outside motivation.

Example of incentives being used in the classroom can be seen in multiple areas.  Freakonomics, a 2005 New York Times listed novel by Steven Levitt and Stephen Dubner that has since been adapted into a documentary by the same title, focuses around several current topics that are being discussed today.  One of the topics discussed centers around incentives.  In this case, motivation is discussed on an educational level with financial benefits.  In a 2009 study, which was conducted after the book was released, the University of Chicago pledged to pay a select group of ninth graders a predetermined amount of money if they were able to contractually meet a set grade point average for the given period of time of one month.  If the student was able to maintain the given grade point average, their name was entered into a lottery with the other students where they were given a chance to win five hundred dollars and a limousine ride back home from school.  The school that participated, Bloom Trail High School located within the Chicago Heights district, was more than willing to take the chance since that the school did not have any financial interest within the study.  From here we begin to focus on two main students.  The first student, Kevin Muncy, has a reputation of being a “bad student.”  He represented a student all teachers have seen before.  Low motivation caused him to almost fail out of his school courses prior to the start of the experiment.  When his mother was asked about the experiment she seems ecstatic.   She embraces the experiment and declares that she will match what money the school gives her son.  She even states, “What parent doesn’t use bribery?  We all bribe our kids in some way.”

From here we meet our second student in the experiment.  Urail King, a freshman at Bloom Trail as well, who has mediocre grades that are not quite to the standards of the University of Chicago.  Urail appears to have a mother that is deeply concerned with her sons grades and will do anything to make sure he is up keeping the standard that she knows he can perform at.  We also learn that Urail is a very financially driven student who runs his own lawn care business.  “Money doesn’t bring happiness, but it sure helps!” states Urail.  Throughout the experiment we begin to notice an increase in both the students attitude.  Kevin states that he is proud when one of his grades jumps to a D level in such a short time.  He begins to dream about outside awards he can purchase using his incentive money gained from the experiment even though little is being done on paper to bring up all of his grades.  On the other hand we see Urail begin to hit the books harder than ever before.  Constantly he is seen studied and fantasized about what he is going to do with his new found wealth.

 After several months the last payout was witnessed at the high school.  We learn that Kevin has flunked out of every one of his classrooms and had to repeat the ninth grade.  Kevin states, “I will never give up my social life for grades.  That is something I am not willing to do.”  On the other hand, Urail passed all of his classes and became eligible to get the fifty dollars and the chance at the lottery.  (We do not know if Urail actually won the lottery but he begins dreaming that he has.)  Overall the study concluded that there was a total of 5%-7% more students passing the ninth grade than prior to the study.  This shows that with a financial incentive, students found more reasons to motivate themselves to do better in school with an extrinsic reward than to just self motivate themselves.  Another item this shows is that the motivation not only comes from school, but from the home as well.

From here the question must be raised.  Where does the need for motivation really need to begin to take place?  Where should it take place?  Or how often?  How often should we focus on intrinsic motivation rather than rewards and other extrinsic motivators?  Questions like these bring the debate to the table.  It is clear that motivational needs are present not only in secondary education that we have just learned, but also in years prior to this.  Who knows if Kevin would have succeeded if his mother had been more supportive in earlier grades, and not let me worry so much about his social appearance, something he was not willing to give up in the end.  Perhaps if Urail’s mom had not been so instant on his homework, where he would have ended up in the end of the experiment?  He possibly could not have qualified for the reward given at the end of each month.  One must also consider what societal and environmental factors took place that could have affected the outcome if the beginning product was different.

Looking from an educational standpoint it is clear that this experiment gave good insight into thing we must begin to look at.  Students are coming from a wide variety of backgrounds, each more unique than the last.  I think it is clear that bribing students will not be going away anytime soon.  However, the above experiment has brought to the public eye the need to answer some of the above questions as well as increase the overall need more intrinsic motivation to be present inside the classroom.  Using strategies that we have seen work in our own lives, while attending Ball State, and else where we can begin to level the playing field against a topic as large as this.  To be a truly good educators this must be at the top of concerns we have for our students.