Increasing Student Motivation

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ABSTRACT

Motivation is a determining factor in student ability to learn and achieve academic success. It is not only a challenge to most faculty to motivate students, but rather more challenging to maintain their motivation high. There are many factors that impact student motivation ranging from pre-college experience to social aspects and future expectations and ambitions. Knowledge and appreciation of these factors by faculty are important elements in increasing and sustaining student motivation. This paper presents factors affecting students' motivation and suggestions for increasing their motivation towards achieving the highest academic performance.

Introduction

Motivation, a force that energizes and directs behavior toward a goal is perceived as one of the most important psychological concepts in education. Student motivation is critical for learning, and several researchers have found a positive and robust correlation between motivation and achievement (Vallerand & Senecal, 1993). Since the beginning of the twentieth century, the concept of motivation has been studied according to a variety of perspectives (Overton, 1984; Weiner, 1992). In the last thirty years, many models, approaches and theories have inspired researchers studying motivation and education. According to Pintrich and Schunk (1996), many are the result of modern conceptions of human beings and of the way in which they learn. In addition, three important educational schools of thought seem to guide modern theories of motivation: behaviorism, cognitivism, and humanism. Among these approaches, Deci and Ryan's motivation theory (1985, 1991) stands Their motivation theory seems more complete than others as, on the one hand, it emphasizes the dynamic relationship between the individual and his environment and, on the other hand, it is very relevant for educational research (Vallerand, Blais, Brière and Pelletier, 1989). According to the theory of cognitive evaluation (Deci and Ryan, 1991), an individual's motivation is mainly determined by his needs for self-determination and competence. The authors emphasize that there also exists in individuals an important need for affiliation and that this need complements that for autonomy, and is also necessary for the development of self-determined motivation. In fact, according to Deci and Ryan, everything, which is likely to influence these three factors, that is to say the feelings of self-determination, competence and affiliation, would thus have an impact on student motivation.

Student motivation may be the single most-powerful indicator of a student's likelihood of persisting. One of the major sources of stimulation of motivation is the teacher. His enthusiasm and values have much to do with his students' interest in the subject matter. Retention professionals agree that there is a tremendous difference between being academically prepared for college and being ready to persist and succeed academically. Because the internal processes that drive students' decisions are not readily apparent, many students may drop out before the institution is even aware of their needs.

Students Learning

Effective teaching requires that instructors should know how students learn. Questions such as: How can I teach you if I don't know how you learn?; must be addressed by instructors. The assumption that if one knows a body of knowledge he can teach; has been questioned. Ascertaining the learning curves for each student requires teachers to:

- > Explore theories of cognition
- ➤ Know the backgrounds of the students to be taught
- ➤ Be aware of differences in learning styles, stages of development, and abilities among students to be taught.

More recently, the Cognitive approach has been favored as an explanation for how people learn (Northern Illinois University 2002) in settings such as college environments, where knowledge is complex and process is as important as recall of facts. Cognitive psychologists focus on memory, reasoning and tasks such as critical thinking and problem solving. They are most interested in how learners construct meaning as they encounter new information and try to fit it in with what they already know. These theorists describe learning as a process of accommodating new information into existing frameworks that the learner has established for fitting pieces of information together at times; new frameworks must be constructed as well.

Motivation

In general terms, student motivation "refers to a student's willingness, need, and desire and to participate in, and be successful in, the learning process". Students who are motivated do:

- > Select tasks at the border of their competencies.
- > Initiate action when given the opportunity.
- Exert intense effort and concentration in the implementation of learning tasks.
- > Demonstrate persistence and eagerness to learn.
- ➤ Go beyond the scope of the required tasks in implementing their assignments.
- > Show generally positive emotions during ongoing action, including enthusiasm, optimism, curiosity, and interest.

Less motivated students, on the other hand," are passive, do not try hard, and give up easily in the face of challenges" (Northern Illinois University 2002).

Student motivation categories

- *Extrinsic motivation*: A student can be described as extrinsically motivated when he or she engages in learning "purely for the sake of attaining a reward or for avoiding some punishment" (Northern Illinois University 2002).
- *Intrinsic motivation*: A student can be described as intrinsically motivated when he or she is motivated from within: Intrinsically motivated students actively engage themselves in learning out of curiosity, interest, or enjoyment, or in order to achieve their own intellectual and personal goals.

Intrinsically motivated students (Northern Illinois University 2002):

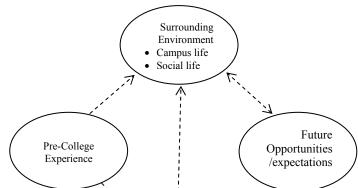
- Earn higher grades on average, than extrinsically motivated students.
- Employ "strategies that demand more effort and that enable them to process information more deeply"
- Are more likely to feel confident about their ability to learn new material.
- Use "more logical information-gathering and decision-making strategies" than do extrinsically motivated students.
- Are more likely to engage in "tasks that are moderately challenging, whereas
 extrinsically oriented students gravitate toward tasks that are low in degree of
 difficulty".
- Are more likely to persist with and complete assigned tasks.
- Are more likely to be lifelong learners and continuing to educate themselves outside the formal setting.

Some researchers object to describing student motivation as either intrinsic or extrinsic. They point out that most successful people are motivated by both internal and external factors, and suggest that educators should build on both types. However, motivation created by external drivers is expected to decline in the absence of such motivating factors. Internal motivation, on the other hand, requires changing negative beliefs, attitudes and behaviors resulting in more self satisfaction and, therefore, has long lasting effect and should be emphasized and reinforced.

Factors Affecting Students' Motivation:

Students go to the classroom with a number of thoughts in their minds and experiences that influence their learning and perception of what they learn. Some of these thoughts are conflicting and some are supporting each other. It is a challenge to the faculty to keep these issues in mind in trying to keep positive attitude of the student towards what he is learning and raising his motivation. These factors are summarized in Figure 1 and include:

- Pre-college experience.
- Surrounding environment
 - ✓ Campus life
 - ✓ Social life



- ✓ Facilities
- Classroom experience
 - ✓ Pedagogy
 - ✓ Faculty
 - ✓ Major/curriculum/course
 - ✓ Grades
 - ✓ Classroom environment
- Future opportunities/expectations
 - ✓ Job opportunities
 - ✓ Ambitions

How to Increase Students' Motivation?

The big question in the mind of most faculties is how to increase student motivation? In the minds of many the other question arises; how to maintain student motivation? The answer to these two questions requires achieving a balance between student internal and external motivation.

Cognitive psychologists emphasize internal motivation of the learner (as opposed to external stimulus) and the role of social communities in learning. Theorists point out that both student and classroom factors affect motivation. Students' beliefs about whether they are in control and competent to perform a learning task, as well as the nature of the tasks, the reward and goal structure, the instructional methods and teacher expectations and behaviors can affect learning. They suggest that teachers help students to use "effort" as an explanation for their learning results rather than "luck," that they provide variety, an appropriate level of challenge, a collaborative rather than competitive ethos and sufficient organizational structure for learning. Students at the peripheries of learning domain have particularly high needs for support.

The following are some suggestions for increasing students' motivation to learn:

- Demonstrate enthusiasm and motivation towards the subject taught and towards student learning and success.
- Engage and challenge students to enhance learning and encourage student participation.
- Establish low stress learning environments that promote interpersonal interaction and create atmospheres of caring, mutual inquiry and respect. Such environment is more likely to foster deep learning.
- Realize that teaching is more than simply providing knowledge hoping that students will be motivated enough to learn.
- Treat students as co-learners.
- Encourage teamwork activities.
- Involve students in setting their own objectives and draw on students' relevant experience.
- Ensure that course materials relate to students' lives and highlight ways learning can be applied in real-life situations. Relate learning to the world of work.

- Reward success and keep hopes high.
- Listen to student voices and address their needs in an encouraging manner. Ask students for feedback on your teaching and value their input.
- Energize students when delivering the lecture.
- Make students feel welcome and supported at the university. Pay attention to individual student's needs.
- Respond positively to student questions, and praise students verbally for work well done. Use written encouraging remarks in the evaluation of students work when deserved (e.g. "good job", "well done", etc.)
- Build quality relationships with all students and show them that you care about their success/problems. Extend help to students outside the class room.
- Emphasize active learning.
- Assign challenging but achievable tasks for all students.
- Use different teaching methods and aids. Avoid repetitions and routine work.
- Design projects that allow students to share new knowledge with others.
- Use extrinsic rewards sparingly. If extrinsic motivators are to be used, they are most effective when rewards are closely related to the task accomplished. Also, rewards should only be given when they are clearly deserved.
- Ensure that classroom expectations for performance and behavior are clear and consistent. Help students understand the criteria for individual assignments by giving them examples of high-, average-, and low-level work and then providing an opportunity to discuss how each piece was evaluated.
- Break large tasks into a series of smaller goals. Doing so prevents students from becoming overwhelmed and discouraged by lengthy projects.
- Assess student work on timely basis and be sure that feedback is clear and constructive.
- Evaluate students based on their achievements, not in comparison to other students.
- Show less emphasis on grades and more on learning, understanding and participation.
- Cite good examples for success and opportunities.

Conclusions

- Students can and will operate in a more self-motivated and responsible manner if they are taught in an environment that fosters success, provides opportunities for insight, allows them to see what power they have over what happens to them.
- Faculty who attempts to teach without inspiring his student with a desire to learn is hammering a cold iron. It is a pre-requisite for motivating students that the faculty himself is motivated and enthusiastic for the subject and for student learning.
- Grades have a place in motivating students but grades should not be overly emphasized. Try to make the material appear meaningful and somewhat interesting.
- A faculty's enthusiasm and values have much to do with student interest in the subject matter. A faculty should use positive reinforcement rather than negative

- reinforcement and should provide the students with an opportunity to excel in their studies.
- If students don't see a feasible way to accomplish and to succeed, they will not be motivated to study. Presenting the students with clear objectives should foster the sense of being able to achieve.
- Drivers for motivation vary among individuals; some are motivated through rewards and incentives, others through challenge, and others through competition. Try to utilize the suitable means as appropriate.

References

Deci, E.L., & Ryan, R.M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum.

Deci, E.L., & Ryan, R.M. (1991). A Motivational Approach to Self: Integration in Personality. Dans R.A. Dientsbier (Ed.), *Perspectives on Motivation:* Nebraska Symposium on Motivation. Lincoln, NE: University of Nebraska Press.

Overton, W.F. (1984). World views and their influence on psychological theory and research: Kuhn-Lakatos-Laudan. *In* H.W. Reese (Ed.), *Advances in child development and behavior* (Vol. 18, pp. 191-226). Orlando, FL: Academic Press.

Pintrich, P.R., & Schunk, D.H. (1996). *Motivation in Education*. Englewood Cliffs, NJ: Prentice-Hall.

Vallerand, R.J., & Sénécal, C.B. (1993). Une analyse motivationnelle de l'abandon des études. *Apprentissage & Socialisation*, 15 (1): 49-62.

Vallerand, R.J., Blais, M., Brière, N., & Pelletier, L. (1989). Construction & validation de l'Échelle de Motivation en Éducation. *Revue canadienne des sciences du comportement*, 21: 323-349.

Weiner, B. (1992). Human Motivation (2nd Ed.). New York: Springer Verlag.

Faculty Development and Instructional Design Center, "Strategies for Increasing Learning and Student Motivation", Northern Illinois University 2002.