



# Motivation To Learn

Connie Frith  
Educational Communications and Technology  
University of Saskatchewan

## Abstract

Motivation to learn is paramount to student success. The sources of motivation however are complex. This paper examines the internal and external factors that influence the motivation to learn, as well as the principles of motivation as applied to instructional design. The intent of the paper is to be pragmatic in focus and it is written to educators for use in the classroom. The applications of motivation theory in education are limited only by one's imagination.

## Definition

Inertia is a property of matter by which it remains at rest or in uniform motion in the same straight line unless acted upon by some external force. Motivation can be defined as the internal drive directing behavior towards some end. Motivation helps individuals overcome inertia. External forces can influence behavior but ultimately it is the internal force of motivation that sustains behavior. People work longer, harder and with more vigor and intensity when they are motivated than when they are not.

As an instructor I often consider student motivation to be up to the student. Such abstract concepts as attitude and needs are personal and not easy for an instructor to address.. Adult educators are dealing with a group of individuals whose needs and motivations are very diverse. Life experience widens the gap between students and creates a diversity that is important in learning. Instructional designers must meet the challenge of designing instruction that is motivating. There are a number of motivational techniques which have a great bearing on instructional design. The potential benefits of attention to motivation in instructional design are many.

# **Components of the Motivation to Learn**

## **1. Curiosity**

The behaviorist talks about reward and punishment as being the main influence on learning. Behavior can be focused toward a reward or away from a punishment. Human behavior is far more complex. People are naturally curious. They seek new experiences; they enjoy learning new things; they find satisfaction in solving puzzles, perfecting skills and developing competence. A major task in teaching is to nurture student curiosity and to use curiosity as a motive for learning. Providing students with stimuli that are new but not too different from what they already know stimulates curiosity. Presenting stimuli that are completely foreign may create anxiety rather than curiosity. There must be a balance between complexity and clarity.

Ask students questions or create a problem situation rather than presenting statements of fact. This increases student interest and curiosity to learn more about the topic. Curiosity is a motive that is intrinsic to learning, and thus continued learning is not dependent upon the teacher rewarding learning.

## **2. Self-Efficacy**

The term self-efficacy reminds me of a phrase my mother was always fond of, "the power of positive thinking." This concept was again brought to mind at a lecture I attended given by a sports psychologist who was hired by the Saskatchewan Roughriders prior to their winning the Grey Cup in 1989. He had each player wrap a piece of tape on their ring fingers to represent the grey cup ring they would be wearing after winning the grey cup. They were asked to believe in their ability to win. This concept of self-efficacy can be applied to student learning. Students that harbor doubts of their ability to succeed are not motivated to learn.

Dividing tasks into chunks and providing students with early success is a method of developing confidence in the student. This is described by Driscoll (1994) as performance accomplishments, one of four possible sources of self-efficacy. The other three she describes include vicarious experience, verbal persuasion and physiological states. Vicarious experience is when the learner observes a role model attaining success at a task. Verbal persuasion is often used as others persuade a learner that he or she is capable of succeeding at a particular task. The final possible source of self-efficacy is physiological states.

This is the “gut feeling” that convinces a student of probable success or failure. For example a student may feel physically sick when they arrive at an exam. There is little a teacher can do to alter a student’s physiological state, other than to suggest relaxation exercises or desensitization training to overcome fears and anxiety.

### **3. Attitude**

Every educator has encountered students who are labeled as having a bad attitude. Attitude is an illusive commodity. A manager dealing with an employee with an “attitude” is instructed to deal specifically with the behavior that is occurring. Performance evaluations are not to include the term, “bad attitude”. Rather specific examples of actual situations must be cited of employee job performance. In an educational setting the performance that we are striving for is learning, which in some cases can be judged through behavior but not always. As with employees it is important to point out to students specific behaviors that demonstrate an attitude. However the attitude of a student toward learning is very much an intrinsic characteristic and is not always demonstrated through behaviors. The positive behaviors exhibited by the student may only occur in the presence of the instructor, and may not be apparent at other times. For example a person may have a poor attitude toward the police but when confronted by a policeman they behave courteously and respectful. The behavior is contrary to the attitude.

Fleming and Levie (1993) summarize three approaches to attitude change; “providing a persuasive message, modeling and reinforcing appropriate behavior and inducing dissonance between the cognitive, affective and behavioral components of the attitude.” They suggest that if a person is induced to perform an act that is contrary to that person’s own attitude, attitude change will result.

### **4. Need**

The needs of individual students can vary greatly. The most well known and respected classification of human need is Maslow’s hierarchy of needs. There are five levels of need in this hierarchy: (1) Physiological (lower-level) (2) Safety (lower-level) (3) Love and belongings (higher needs) (4) Esteem (higher need) (5) Self-Actualization (higher need). The importance of this to motivation is the lower-level needs must be satisfied at one level before the next higher order of needs become predominant in influencing behavior. Education fits into the realm of achieving higher level needs. Students will

not be ready to learn if they have not had their lower level needs met. Children who are sent to school hungry, are not able to learn. Their lower needs must be met first.

## **5. Competence**

Competence is an intrinsic motive for learning that is highly related to self-efficacy. Human beings receive pleasure from doing things well. Success in a subject for some students is not enough. For students who lack a sense of efficacy teachers must not only provide situations where success occurs but also give students opportunities to undertake challenging tasks on their own to prove to themselves that they can achieve.

Prerequisite skill development promotes competence in a field of study. There is an old saying, give someone a fish and they will eat for a day, teach someone to fish and they will eat for a lifetime. Learning a skill without an understanding of the process is doomed to be lost. External support, respect and encouragement are important for the student to achieve competence. The achievement of competence itself becomes the intrinsic motivating factor.

## **6. External Motivators**

Active participation provides a stimulating environment and combats boredom. Learning strategies should be flexible, creative and constantly applied. Stimulating learning environments provide variety in of presentation style, methods of instruction and learning materials. Students will learn in boring situation provided with motivators such as fear, pressure and extrinsic goals (grades, job status, and so on). The learning environment under those motivators is often tense and stressful.

Grades have value as an external motivator in learning if the process of evaluation is well planned considering motivation theory. To learn more about grades as a motivator click here [GRADES](#) (Rick link to section on grades)

Reinforcement is another form of an external motivator. The value of reinforcement as a motivator is questioned from those who suggest that once the reinforcement is removed the behavior stops. Critics suggest students must have intrinsic motivation to accomplish certain activities. In intrinsic motivation the “doing” is the main reason for finishing an activity. With extrinsic motivation the value is placed on the ends of the action.

The value of reinforcement is on the road to intrinsic motivation. Students need confidence building reinforcement such as praise and encouragement to guide them. Students can also provide their own self rewards for accomplishing goals they have set.

External motivators must be accepted, valued and endorsed by students. They must feel that their perspectives are valued, and they have opportunities to share their thoughts and feelings.

“External conditions that support these internal conditions include; provisions for relevancy, choice, control, challenge, responsibility, competence, personal connection, fun, and support from others in the form of caring, respect and guidance in skill development.” McCombs (1996)

## **The ARCS Model of Motivational Design**

Keller’s model of motivational design views motivation as a sequence. You first gain the attention of the learner, and then provide relevance of what you are teaching to their personal goals and needs. The learner gains confidence as the learning process unfolds. The satisfaction of the new knowledge provides motivation to continue learning. Driscoll (1994)

### **Attention**

Gaining and maintaining attention follows many of the same principles as discussed in providing a stimulating learning environment and arousing curiosity. Often it is easy to gain attention at the beginning of a lesson. Sustaining the attention is a challenge. Provide variety in presentations through media, demonstrations, small group discussions, or whole class debates. Likewise, printed text can be varied through different type sizes or fonts or the inclusion of diagrams or pictures.

### **Relevance**

Helping students find relevance while learning can be a daunting task for some subjects. Linking what is being taught to something that is familiar and relevant to the student helps in the motivation of that student. Motivation amounts to persuasion for knowledge based subjects that provide the basis for learning future concepts. Often assurances are given that the student will eventually see the relevance of what they are learning.

Keller includes familiarity as a component of relevance. Instruction is relevant to the learner if it is related to concrete examples with the learners' experience. Metaphors, analogies and stories relate information to something the student is familiar with, and helps students understand new concepts.

Once the student sees the relevance they are then in a position to set goals. Self imposed goals provide relevance for the student. Actively setting goals can be an important source of motivation. When individual set goals, they determine an external standard to which they will internally evaluate their present level of performance. Goals must be explicit and attainable to sustain motivation. Often student set a goal such as achieving 70% on a test. Goals should be more explicit. An example of an explicit goal is learning to calculate a diabetic diet without the use of references. The eventual goal for the student is employment in the field of menu marking. Goal setting provides relevance...

It is important to be sensitive to the individual need for achievement and for affiliation when asking students to set goals. Students who have a high need for affiliation benefit from cooperative groups working together toward the achievement of a goal, rather than individual goal setting.

## **Confidence**

Confidence and self-efficacy are closely aligned. Three strategies for developing confidence are outlined by Driscoll (1994).

(1) Create a positive expectation for success by making it clear just what is expected of students. Break complex goals into smaller chunks. It is easier to eat an elephant if you do it in small chunks.

(2) Provide success opportunities for students. Learners gain confidence if they are given enough assistance to perform a task they are not quite capable of doing on their own.

(3) Provide learners with a reasonable degree of control over their own learning. Help them to recognize that learning is a direct consequence of their own efforts

## **Satisfaction**

Satisfaction can be enhanced in a learner by celebrating successes. Often we fail to realize the impact of this on adults. Publicly celebrating success provides reinforcement for the learner receiving the acknowledgment but also motivates other learners to strive for this acknowledgment. Praise is often overlooked as a strong motivator for adults.

In a classroom setting it is important to find something to celebrate with all students. I have witnessed the power of acknowledgment at our division meetings at work. Our new dean was very quick to publicly acknowledge and celebrate our successes. As program heads with many administrative duties as well as teaching duties, we often heard little of what others in the division were doing. The dean kept us connected with her constant celebration of the great things large and small that were happening all the time. I found my need for inclusion in this celebration very motivating. Somehow the dean was able to find something of merit to publicly celebrate about every program head in the division.

At times in an educational environment a learner's satisfaction can be influenced when he/she compares themselves to others who may have done as well or better. It is important to point out to students that their learning outcomes are individual and must be consistent with their own expectations. Marcy Driscoll (1994) summarized many of the applications of the ARCS model in the table below.

<b>Instructional Strategies for Stimulating Motivation as Suggested by the ARCS Model</b>	
Gaining and Sustaining Attention	<p>Capture students' attention by using novel or unexpected approaches to instruction</p> <p>Stimulate lasting curiosity with problems that invoke mystery.</p> <p>Maintain students' attention by varying the instructional presentation.</p>

<p>Enhancing relevance</p>	<p>Increase the perception of utility by stating (or having learners determine) how instruction relates to personal goals.</p> <p>Provide opportunities for matching learners' previous experiences.</p> <p>Increase familiarity by building on learners' previous experiences.</p>
<p>Building confidence</p>	<p>Create a positive expectation for success by making clear instructional goals and objectives.</p> <p>Provide learners with a reasonable degree of control over their own learning.</p>
<p>Generating satisfaction</p>	<p>Create natural consequences by providing learners with opportunities to use newly acquired skills.</p> <p>In the absence of natural consequences, use positive symbolic awards.</p> <p>Ensure equity by maintaining consistent standards and matching outcomes to expectations.</p>

## A Motivating Learning Environment

Spitzer's (1996) concept of supermotivation puts emphasis on the activity rather on the individual. Comparing learning to sport, he acknowledges that most activities are inherently boring. The activity of golf for example is rather repetitive and boring if taken out of the context of the game. The motivating contexts of the game include: **action, fun, choice, social interaction, error tolerance, measurement, feedback, challenge and recognition.** These factors applied to a learning situation are motivating for students.

Action involves getting learners out of their seats and actively involved in the learning process both mentally and physically.

**Fun** helps to energize students and provides opportunities for different formats and student involvement. Computer games are a good example of how to imbed learning activities with fun.

**Choice** provides variety and learner control. Choice may be provided through choice of learning method, content or instructional materials.

**Social Interaction** is a higher-level need according to Maslow. Opportunities for social interaction can include small group discussions, peer tutoring, collaborative problem-solving and decision-making.

**Error tolerance** is often low in educational settings. Learners must feel comfortable to make mistakes and have opportunities to learn from them.

**Measurement** such as score keeping in sports is a motivating factor. Measurement in sports tracks progress. In a learning environment measurement can be repositioned into a facilitating force that includes focusing on formative evaluation, soliciting learner input into what should be measured, and encouraging self-measurement.

**Feedback** in sports is always immediate and predominately positive. In learning often feedback is discouraging. Constructive feedback should be continuous, pointing out the positive and focusing on how performance can be improved in the future.

**Challenges** can be motivating particularly if the learner responds to challenges by setting goals. Surprisingly self set goals tend to be more ambitious than those set by others.

**Recognition** should occur for minor achievements as well as major ones. It is important to point out many positives to the learner.

## **Message Design and Attitude Change Principles**

The principles of attitude change can be explained using the communication model of the source sending a message to a receiver through a channel.

Wlodkowski (1985) classifies attitudes as having four directions towards, the instructor(the source), the subject matter(the message) and the learning situation(the channel), themselves as learners (the receiver) and the

expectancy for success they have for themselves or self-efficacy. All of these attitude directions will influence the students motivation to learn.

Often as educators our emphasis is on the content of the message. I began my career as a nutritionist diet counseling, emphasizing the diet to be followed, teaching which foods to avoid, which foods to include and which foods to eat occasionally. This method does not address the many other factors that influence eating. What of the factors that influence the communication process of teaching the diet. Is the client comfortable with the source? Do they know the credentials of the source? Are they comfortable with the communication process? What noise is there in this communication process? Perhaps the client has just been diagnosed with diabetes and their mind is preoccupied with the thought of getting daily needles. What are the receivers' needs and motivation?.. Changing attitudes and habits around eating behavior is complex and for me illustrates many of the problems associated with motivating learners to learn.

### **Contributions of the Source to Attitude Change**

The perception of the source by the receiver as credible and attractive will reflect on the attitude of the receiver. Attractive does not just refer to appearance. Other factors such similarity and familiarity have an impact on the receiver's perception of what is attractive. Credentials are only one aspect of credibility. Flemming and Levie (1993) A source with impeccable credentials yet who is not well prepared or knowledgeable has poor credibility..

The source does not function in isolation during the communication process. The source/receiver relationship highly impacts the motivation of the receiver.

### **Contributions of the Message to Attitude Change**

Techniques of developing persuasive and motivating messages can be learned from advertisers. The audience is always informed of the expertise of a highly credible source in advertizing. The message is designed to have belief congruence with the receiver by arguing in favor of positions the receiver is known to hold.. It praises the things that are known to be important to the receiver. Once the relationship between the receiver and source has been enhanced by establishing credibility or similarity, begin teaching the content.

Persuasive messages are sequenced to give the con arguments prior to the pro arguments. Cigarette advertisers improve their credibility by presenting the health risks associated with cigarettes prior to giving their sales pitch. Students' needs and goals can be influenced by presenting all sides of any debate.

### **Contributions of the Channels to Attitude Change**

The term channel is used in at least two ways. It can refer to the medium used to transmit the message such as television, radio, film or it can refer to human sensory capabilities. The latter includes vision, hearing and touch. The effectiveness of any one type of media over another has not been proven. Face-to-face communication however has been shown to be far superior in promoting acceptance than mediated communication. Computers are new and exciting to many individuals yet the success of the lesson is dependent on good instructional design.

### **Contributions of the Receiver to Attitude Change**

Advertisers have a very clear target for their message. They understand the target group. They design the message to fit the receivers of the message. Educators can learn a great deal about motivational design through thorough learner analysis.

The receiver cannot be assumed to be an empty vessel into which the message is poured. Flemming and Levie (1993) Each receiver has their own set of life experiences and attitudes that influence their interpretation of the message. In the communication model this may amount to noise effecting the communication process. It is important for the source (instructor) to have a clear understanding of the receiver (the student).

## **Conclusion**

Motivation to learn is paramount to student success. The sources of motivation are complex. The motivation to learn is personal and comes from within an individual, but can be influenced by external factors. Educators must keep the principles of motivation at the fore front of all instructional design. The applications of motivation theory are limited only by one's imagination. The concepts learner motivation underline the importance of learner analysis in instructional design.

## References

Driscoll, Marcy. (1994). Psychology of Learning for Instruction. Boston: Allyn & Bacon.

Fleming, M., Levie, W. H. (1993). Instructional Message Design, Principles from the Behavioral and Cognitive Sciences. Educational Technology Publications, Englewood cliffs, New Jersey, 1993.

McCombs, B. L. (1996).  
<http://www.mcrel.org/products/noteworthy/barbaram.html>.

McKeachie, W. J. (1994) Teaching Tips. D. C. Heath and Company, Lexington, Massachusetts.

Spitzer, D. R. (1996). Motivation: The Neglected Factor in Instructional Design, Educational Technology, May-June.

Wlodkowski, R. J. (1986). Enhancing Adult Motivation To Learn, Jossey-Bass Publishers.

### **A related web site:**

<http://library.clark.cc.oh.us/search/dMotivation+in+education%2E/-5,-1/exact&d+motivation+in+education&13,15>

## **Grades as a Motivator**

Grades represent for the student an expert's appraisal of what they know in a certain discipline or subject. They often provide access for the student to a goal such as access to a college, university or to a job. My experience at university earning a degree in nutrition was only the first step in gaining access to the professional designation of dietitian. All graduates of the Bachelor of Science in Nutrition must attain an internship position at an accredited facility to complete their education and receive their professional designation. There are more graduates than there were internship positions. Students were once again put into a competitive position, with grades as the focus. There was yet another hurdle to jump, access to an internship. Grades become a major motivating factor in this competitive environment. Grades are motivators toward professional goals. It is only after attending graduate school that the love of learning has become my goal.

“Unfortunately, grades motivate studying to get a good grade rather than studying for learning that is retained and used.” McKeachie (1994) It is important when designing evaluation methods that motivational techniques become an underlying focus. In the ARCS model of motivation relevance, confidence and satisfaction speak to the issue of the love of learning. Students must realize the relevance of the subject they are learning to future competence in a field of study. Consequently their confidence and eventually competency become the underlying motivators. Grades can provide attention and satisfaction but often do not result in prolonged competence. Evaluation techniques that consider student relevance and confidence can provide motivation to life long learning. Educators must increase the value of learning and affect the students' expectancy that investment in course activities will lead to success in achieving their goals. McKeachie (1994)

Grade must reflect the changing world. Some of the valued skills of the past are no longer important. Today's job market demands a great deal from its employees. In a period of great change many employers are looking for people with “soft skill” such as flexibility, the ability to deal with people and with change. Skills needed in the work place are rapidly changing. An emphasis has changed from learning specific skills to problem-solving and interpersonal skills.. At the root of these skills is student motivation to learn. Since grades

provide access for students to many personal goals,. it is important that they reflect an evaluation of the skills graduates must possess to be successful.