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Five key ingredients for improving student motivation

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ABSTRACT

Motivation is probably the most important factor that educators can target in order to improve learning. Numerous cross-disciplinary theories have been postulated to explain motivation. While each of these theories has some truth, no single theory seems to adequately explain all human motivation. The fact is that human beings in general and students in particular are complex creatures with complex needs and desires. With regard to students, very little if any learning can occur unless students are motivated on a consistent basis. The five key ingredients impacting student motivation are: student, teacher, content, method/process, and environment. The focus of this article is to provide the educator with suggestions from each of the five key ingredient areas that can be used to motivate his or her students. What is the best way to motivate students? The short answer is that all of the strategies enumerated in this paper can be used...as often as possible. Educators could start just by choosing and trying three new possibilities for enriching student motivation. Or, more importantly, educators could watch themselves and their own behaviors to become self-aware of new understandings about motivation.

Keywords: Student motivation, learning success, improving educational motivation, student success

INTRODUCTION

The educational equivalent to “location, location, location” is likely to be “motivation, motivation, motivation,” for motivation is probably the most important factor that educators can target in order to improve learning (Olson, 1997). Motivation is defined as the act or process of motivating; the condition of being motivating; a motivating force, stimulus, or influence; incentive; drive; something (such as a need or desire) that causes a person or student to act (Merriam-Webster, 1997); and the expenditure of effort to accomplish results (DuBrin, 2008).

Numerous cross-disciplinary theories have been postulated to explain motivation. For example, some theories claim that people or students are motivated by material rewards, desire to increase their power and prestige in the world, interesting work, enriched environments, recognition, or being respected as an individual. Each of these theories has some truth but no single theory seems to adequately explain all human motivation. The fact is human beings in general and students in particular are complex creatures with complex needs and desires. Students are not purely physical, economic, political, or psychological beings. H.W. Beecher said, “God made man to go by motives, and he will not go without them anymore than a boat without steam, or a balloon without gas. Find out what motivates man, touch that button to turn the key that makes men achieve.” (Helmlinger, 1997)

Student motivation is an essential element that is necessary for quality education. How do we know when students are motivated? They pay attention, they begin working on tasks immediately, they ask questions and volunteer answers, and they appear to be happy and eager (Palmer, 2007). Basically, very little if any learning can occur unless students are motivated on a consistent basis. The five key ingredients impacting student motivation are: student, teacher, content, method/process, and environment. For example, the student must have access, ability, interest, and value education. The teacher must be well trained, must focus and monitor the educational process, be dedicated and responsive to his or her students, and be inspirational. The content must be accurate, timely, stimulating, and pertinent to the student’s current and future needs. The method or process must be inventive, encouraging, interesting, beneficial, and provide tools that can be applied to the student’s real life. The environment needs to be accessible, safe, positive, personalized as much as possible, and empowering. Motivation is optimized when students are exposed to a large number of these motivating experiences and variables on a regular basis. That is, students ideally should have many sources of motivation in their learning experience in each class. (Palmer, 2007; Debnath, 2005; D’Souza and Maheshwari, 2010)

The focus of this article is to provide the educator with suggestions that can be used to motivate his or her students. As such, suggestions are provided for each of the five key ingredient areas impacting student motivation: student, teacher, content, method/process, and environment. Please see Table 1 (Appendix) for a synopsis of these five key ingredients.

INGREDIENT 1: STUDENT

“You cannot push anyone up the ladder unless he is willing to climb himself.” - Robert Schuller

The student’s role in education is crucial and should go beyond the traditional view of student as customer or recipient of knowledge. In addition to the roles of buyer and recipient,

“students are the raw materials for education and the primary products of educational transformations; and most important...students are key members of the labor force involved in creating education” (Lengnick-Hall and Sanders, 1997, p. 1335). Also, the increasing diversity of individual differences among students can be seen in time management, learning styles, maturity, demographics, experiential background, cultural orientation, and interests. As such, Senge et al. (1994, p. 489) suggest that teachers should be “producers of environments that allow students to learn as much as possible” or that schools should become learning habitats wherein relationships are fostered between people, students develop their own individual instruction plan, and a variety of investigating system options replace the passive receipt of information. (Senge et al., 1994; Lengnick-Hall and Sanders, 1997) Some tips for improving Ingredient 1 or student contributions to motivation as listed below. That is, student motivation is enhanced when these factors pertinent to students are present:

- **Intrinsic and extrinsic motivation:** Typical students bring varying degrees of both intrinsic and extrinsic motivation to the learning arena. Intrinsic motivational factors found to be at work with most students include involvement (the desire to be involved), curiosity (find out more about their interests), challenge (figuring out the complexity of a topic), and social interaction (creating social bonds). Extrinsic motivational factors include compliance (to meet another’s expectation, to do what one is told); recognition (to be publicly acknowledged); competition; and work avoidance (avoid more work than necessary). Individuals who are motivated intrinsically tend to develop high regard for learning course information without the use of external rewards or reinforcement. On the other hand, individuals who are motivated extrinsically rely solely on rewards and desirable results for their motivation, e.g., tests and GPA. (Lei, 2010) Students who are motivated externally are at a greater risk of performing lower academically than intrinsically motivated students. It is interesting to note that nontraditional students report higher levels of intrinsic motivation than traditional students. (Dean and Dagostino, 2007; Daniels, 2010; Bye, Pushkar, and Conway, 2007; Afzal, et al., 2010)
- **Various individual and social factors:** Overall academic motivation is affected by various individual and social factors. For example, intrinsic motivation is affected by the reason for preferring the school, the probability of finding a job after graduation, the order of preference, the future expectation, the distinctiveness of testing and measuring activities at the school, and desire to complete a Masters’ degree. In the simplest terms, it is necessary to be motivated and to make an effort. Extrinsic motivation is significantly affected by the probability of finding a job, the attitude towards the teacher, the peer group, the level of income, the appropriateness of the classrooms, the adequacy of teaching materials, and the number of siblings. The most effective extrinsic motivation is the probability of finding a job. (Celikoz, 2010) Also, Gen Y students seem to be more connected to their parents. As a result, it is important to involve the parents in encouraging and motivating their children to do well in college. (McGlynn, 2008; Fulton and Turner, 2008)
- **Hierarchy of needs:** Regarding lower level needs, if a student is hungry or thirsty, it is more difficult to focus on learning. Also, if the environment is physically, mentally, or emotionally unsafe, then it will be hard for the student to put all of his or her attention on learning. If the teacher always is critical of the student, then the student

probably will not feel accepted or that he or she belongs. Low self-esteem and ego will make the student feel unappreciated and unrecognized. As such, the educator must do what is necessary to support the student to a higher level of need satisfaction so that the student can focus his or her attention on learning. Even at the level of self-actualization, the educator may need to provide encouragement or opportunities. (Maslow, 1943)

- Perceived well-being: Students' perceptions may be clouded by their perceived well-being, e.g., bad mood, not being able to find parking, or having a disagreement with someone before class. Well-being or life satisfaction is the degree to which a student is content with his or her life including pleasure in daily activities, meaningfulness of life, goodness of fit between desired and achieved goals, mood, self-concept, perceived health, financial security, and social contact. To increase satisfaction with the learning experience and in turn performance, these well-being factors need to be extrapolated into the classroom. That is, factors beyond quality of teaching can affect student satisfaction including student motivation, course level, grade expectations, type of academic field, and workload difficulty. (Duffy and Ketchard, 1998) At the very least, teachers will need to be compassionate and even supportive of the personal life conditions of their students that surface in the process of education.
- Efficient use of energy and focus: Students should be taught how to produce results while maintaining focus and energy. Businesses and organizations certainly focus on getting the right results with the least effort or cost. Hence, educators need to train students to "stalk" efficient and effective results. In another complementary vein pertinent to the "greening" of business and the planet as a whole, each individual ultimately will be required to become a master of focusing on and using skills such as personal energy conservation and regeneration. This theme of efficiency should serve the student in his or her studies as well as in his or her life and global citizenry.
- Purposeful connection with work: Emergent motivation results from connecting with work as a source of self-expression, exploration, and sustained creativity. It is emergent because purpose arises out of the interaction between a student and what he or she perceives as a significant and meaningful context. That is, students discover their own rewards by mastering new challenges and making unique contributions in a significant and meaningful context. To foster emergent motivation, educators need to design variety into a learning system. This variety can overcome extensive individual differences in student inputs and yield uniformly high levels of perceived personal effectiveness, organizational effectiveness, ability to apply course materials, and satisfaction with both course results and the educational process. Also, students become co-producers in the educational system because they are inherently responsible for the learning work that takes place. (Lengnick-Hall and Sanders, 1997)
- Conscientiousness and achievement: Conscientiousness and achievement motivation are positively correlated with GPA. It is suggested that conscientious students may do better because of differences in achievement motivation capacity. As such, achievement motivation assessments and prior academic achievement could help identify students likely to maximize their potential. On the other end of the continuum, it also could alert educators to less conscientious and less achievement-oriented students. Then, in turn, educators could provide appropriate attention,

incentives, or trainings that positively impact these students. In addition, it may be possible to retrain students to self-regulate motivation for challenging academic tasks, thereby enhancing their effort regulation capacities. Interventions could be developed for this purpose. (Richardson and Abraham, 2009) It seems that success does breed success.

- **Public speaking competence:** Student motivation has been positively related to public speaking competence, but not to the demonstration of communication knowledge (Carrell, 1997). Because fear of public speaking is a prevalent phobia of most people, continued practice in public speaking will teach students how to face their greatest fears and get over them, hence, getting over unconscious blocks, rebuilding traits, and enhancing self-concept. These positive results should make students more confident and motivated.
- **Study time and study habits:** Students lead very busy lives. As a result, evidence shows that students are devoting less time to their studies (Higher Education Research Institute, 2003). While the quantity of time spent studying has an influence on performance, this influence is moderated by the students' study habits. Also, the ability to concentrate influences student performance positively. Having a good set of notes is important, but it still depends on how study time is used. Ultimately, studying has quantitative aspects as well as qualitative aspects, that is, amount of time studying and good study habits are both important. (Nonis and Hudson, 2010)
- **Lecture attendance:** Lectures are viewed as positively associated with academic performance. They also are perceived as valuable and interesting learning experiences for students. Then, why is it that students skip lectures? Lectures may be seen as only one of an array of student pressures. As a result, students engage in a constant decision process that involves weighing the benefits against the costs of attending lectures. Students generally see lectures as optional and not always as a beneficial or enjoyable part of their college time. Non-attendance may simply be a coping strategy that signals difficulty in coping with the content, processes, or schedules associated with formal learning. (Moore, Armstrong, and Pearson, 2008)
- **Comprehensive, long-range educational plan:** The development of a long-range educational plan will help students to value education and to make the most of their time in school. This plan also should contribute to their confidence and reduce the fear of the unknown. That is, students who have compiled a long-range plan are less likely to give up when difficulties occur. This plan is even more effective when it is updated continuously and encompasses the transition from education to career. Creating a vision of adulthood and who they want to become is very empowering. This planning process can empower students to see the connection between school and work. Ultimately, it prepares them for a lifetime of productive employment and continual learning. (Dedmond, 2009)

INGREDIENT 2: TEACHER

“...the really great make you feel that you, too, can become great.” - Mark Twain

Students display more motivational benefits from teachers they like over teachers they dislike (Montalvo, 1998). However, education is much more than a personality contest. The role of teachers seems to be shifting from preprogrammed knowledge dispensers to instead managers of student learning and the learning environment. Therefore, teachers must be empowered to exercise professional judgment in the classroom to attain clearly expressed goals. Professional educators should be given latitude to test individual approaches based on strategic goals and incentive systems. Also, teachers should be provided with training to support them in this expanded role including more time for peer interaction to share views on what is effective. Overall, teachers should do unto the students as they would want done unto themselves. The following suggestions are offered regarding Ingredient 2 or teacher contributions to student motivation:

- **Subject knowledge and motivational level:** The professor's knowledge of the subject matter and the motivational level of the professor are most important to motivate college students to do well in college. That may be because professors could influence the student's internal state of wanting to do well in college. While high school students make statements like I want to get a job, to feel proud of myself, to graduate with my friends, and to avoid feeling like a failure, college students are motivated by the professor's knowledge of the subject matter, the professor's sense of humor, the motivational level of the professor, high quality of teaching, intellectual challenge, engagement in class, and academic help outside of the class. (Weinstein, 2010)
- **Teacher skills:** One important extrinsic factor in the educational environment is the instructor. On examining the degree of learning whether taught by a Ph.D. faculty vs. an M.A. faculty, there is no significant net association between instructor's degree and student assessments of amount learned or instructor effectiveness. (Finegan and Siegfried, 1998) However, all else being equal, students perform better if they: (a) are educated in smaller schools where they are well known, (b) have smaller class sizes, (c) receive a challenging curriculum, and (d) have teachers with greater expertise and experience. For example, curriculum quality and teacher skills make more difference to educational outcomes than initial test scores or racial backgrounds of the students. (Darling-Hammond, 1998) Teacher skills include staying calm, eliminating negative thoughts or feelings, disengaging stress, remembering that students have their own realities and are doing their best, not taking students' actions personally, remembering that students are not bad rather just in the process of development, and maintaining a sense of humor. (Whistler, 1992)
- **Teacher qualifications:** Qualifications of the teacher employed in universities should be questioned and improved. Educators need to acquire new qualities and continue to grow and evolve as they are role models for the students. (Celikoz, 2010) Given that there is variability across campuses, there need to be support structures for educators as well as clear understandings that teaching involves more than just subject matter knowledge and classroom management skills. In particular, Shulman (1987, p. 8) calls the knowledge needed for effectively teaching a specific subject "pedagogical content knowledge" (PCK) which "represents the blending of content and pedagogy into an understanding of how particular topics, problems, or issues are organized, represented, and adapted to the diverse interests and abilities of learners, and presented for instruction."

- Test giving: Teachers need to know how to give tests that are motivating to the students. Tests need to have thematic relevance, that is, they need to aim at checking what students have learned and whether they can apply it to real-life tasks. In addition, tests that are more demanding or challenging than anything practiced in class will have negative effects on student motivation. Also, tests should be based on course objectives and should not involve surprise or novelty. Specifically, test questions should be as easy as possible for test takers to process, even when the content is very challenging. In general, test-taking instructions, terminology, layout, and item choices need to not be ambiguous, confusing, illogical, unclear, imprecise, or poorly designed. (Trugman, 2007)
- Scientific management and human relations: The educator must consider whether to approach students from the viewpoint of scientific management, human relations, or both. Here are some tips on how to add components of both scientific management and human relations from Jamie Doran (1999), the Pennsylvania Institute of CPAs 1998 Outstanding Accounting Educator Award:
 - Use inventive teaching techniques,
 - Encourage your students to embrace technology,
 - Make learning both interesting and entertaining,
 - Require significant effort both inside and outside the classroom,
 - Convey a real sense of caring to the students,
 - Make each student feel special,
 - Help students outside of the classroom and at odd hours,
 - Teach them how to use information to make proper decisions for real life,
 - Students need to know you are approachable,
 - Motivate them to achieve at their maximum level,
 - Instill a fire in your students,
 - Create a classroom environment where students are passionate about learning,
 - Go beyond the confines of the academic setting,
 - Discuss contemporary topics,
 - Share personal relevant experience,
 - Capture the interest of your students,
 - Be devoted to your students,
 - Learn students individual needs and respond appropriately,
 - Develop specialized assignments and schedules when needed,
 - Provide tools for their careers,
 - Promote practical work experience,
 - Foster relationships with local area professionals, and
 - Each semester ask the students to write down what future students should do in order to be successful in the course and put some of these on the next term's syllabus.
- Conscious of small details: Barbara McCombs states that “almost everything (teachers) do in the classroom has a motivational influence on students - either positive or negative.” This includes the way information is presented, the kinds of activities that teachers use, the ways teachers interact with students, the amount of

choice and control given to students, and opportunities for students to work alone or in groups. Students react to who teachers are, what they do, and how comfortable they feel in the classroom. (Olson, 1997) Consequently, small details do make all the difference. Greet each student at the door by his or her first name. Make eye contact and smile. Actively listen to each student. Avoid giving advice. Be genuine. Be clear in approval and disapproval. Let students know you do not carry a grudge. Avoid sarcasm and criticism. Talk to students about negative concerns privately as not to embarrass them in front of others. Walk around the room and give the students an occasional pat on the back or catch their eyes or give them an okay sign as appropriate. (Olson, 1997) Also, use stories, personal examples, and language that engage the students and create rapport.

- Reach out to students: Student engagement is a key to academic motivation, persistence, and degree completion. Teachers are competing for the students' attention, that is, jobs, family, personal activities and interests, surfing the Web, instant-messaging, social media, cell phones and apps, text-messaging, video games, and so forth. In addition, students almost have a "consumer" attitude about learning; it is another acquisition to purchase rather than a learning process. Also, students are used to 24-7 convenience and expect instant gratification from their teachers. Reaching out to students will help in finding a connection between how students learn and how instructors teach. (McGlynn, 2008)
- Know your students and build on their strengths: Use the strengths that students bring to the classroom. For example, Gen Y individuals like group activities and want to learn information relevant to their lives and that can make a difference in the world. That is, experiential and service-learning programs could be very effective with this group. The learner-centered classroom is effective with this group in that it requires a shift from teacher-driven and content-centered learning to seeing the classroom as student-centered and process driven. Collaborative learning is effective with Gen Y. Also, it is important to teach students how to find information and to evaluate the validity of the information. (McGlynn, 2008)
- Value and build relationship: "Relationships are at the heart of teaching since it is an activity based on communication" (MacGrath, 2005, p. 57). Some of the necessary elements that build and maintain constructive relationship include trust, be on their side, treat everyone with respect all of the time, be in charge and lead them to achievement, work together, and show you can listen and accept what the student says. Empathy can help to build a trusting relationship. (MacGrath, 2005)
- Relational turning points: Relational turning points between the student and teacher have been found to impact student motivation. A turning point is any event associated with a change in the relationship. Six turning point event types have been found: instrumental, personal, rhetorical, ridicule/discipline, locational, and other person. These relational turning point events can be positive or negative. However, only the ridicule/discipline category was most commonly judged as negative. In general, positive turning points appear to entail acting on students' interests and needs including providing support and discussing common interests. On the other hand, negative turning points typically involve failing to meet students' needs or expectations, and are perceived as giving harm to the students such as ridiculing a

student or being unavailable during office hours. It is interesting to note that some 62% of students were able to readily identify a relational turning point event with a teacher. As such, the ways in which teachers act toward their students and the students' perceptions of those events may have strong positive or negative consequences. In particular, positive relational turning points have a positive effect on student motivation. (Docan-Morgan and Manusov, 2009)

- **Enthusiasm:** When the teacher is more enthusiastic about a topic, then the students will be more inclined to believe that the topic has value for them. That is, teacher enthusiasm can motivate students. Enthusiasm can be expressed by facial expressions, body language, stating preferences, describing personal experiences or amazing facts, showing collected artifacts, using humor, putting energy into their lesson preparation, and meticulously preparing materials. The teacher also should balance his or her enthusiasm appropriately for the audience. (Palmer, 2007)

INGREDIENT 3: CONTENT

“What the mind of man conceives and he believes, he can achieve.” - Napoleon Hill

At the least, content must be accurate and timely. However, content also should be relevant and useful to the student in his or her life. Olson (1997) notes that student motivation depends on the extent to which the teacher is able to satisfy the student's need for (1) feeling in control of their learning, (2) feeling competent, and (3) feeling connected to others. As such, content also must be included to satisfy each of these student needs. Following are some suggestions for Ingredient 3 or content contributions that will build student motivation. That is, content needs to be developed and improved with awareness of the factors listed below:

- **Students experience success and achievement:** Ensuring that students experience success is an extremely important strategy for motivation. Success creates self-confidence which in turn makes students more inclined to engage in learning. This requires that tasks be moderate and have an achievable level of difficulty. The goal is to have students experience success in their understanding. Some techniques for ensuring this success include: state the goal for the lesson; provide simple and clear explanations; ask the students to express their comments, questions, and ideas; question the students; provide hand-on activities as often as possible; and assessment tasks should be flexible. (Palmer, 2007)
- **Student ownership:** Students feel some ownership of a decision if they agree to it. Whenever possible, students should be allowed to determine class rules and procedures, set learning goals, select learning activities and assignments, and decide whether to work in groups or independently. Allowing students to select learning partners has been shown to improve their motivation to learn. Also, it is important to get students to accept the reasons why some aspects of the course are not negotiable. (Olson, 1997)
- **Student choices:** Human beings are naturally curious and self-directed, that is, they want to learn, make choices, and achieve (Truby, 2010). As a result, students will be more motivated when they are given choices. Doing something one chooses rather than what one has been told to do, can be very motivating. Having some element of

negotiation is better than a classroom that is completely permissive. Some choices might include: who they work with, what book to read, their assignment topic, how the assignment will be presented, and when the assignment is due. However, when offering choices, instructors should construct options that meet the students' needs. Choices should be offered in a manner and context that meets students' needs and that are offered in a non-controlling accepting atmosphere. Guided inquiry is a technique that allows more flexibility in that they choose their research question and methodology, yet the instructor provides some parameters. (Palmer, 2007) As such, the various choice options need to be based on students' needs, interests, goals, abilities, and cultural backgrounds. Choices need to not be too numerous or complex as well as congruent with the students' values. (Katz and Assor, 2007; Simmons and Page, 2010; Garger, Thomas, and Jacques, 2010)

- **Build competency:** Content that builds students' competency requires assignments that challenge students' beliefs, actions, and imaginations. This can be done by having them investigate and respond to issues relating to survival, quality of life, problem solving, and/or real products and situations. Lessons that are more interesting and more personally relevant are more motivating to the students. Internship and work study programs are useful in this regard. In any event, the instructor must draw out the relevance of the class and class work to future employment, quality of life, and/or life skills. (Olson, 1997)
- **Creativity and critical thinking:** Competence also is learned from experiences that involve both creative and critical thinking. Creative and critical thinking requires the student to define the task, set goals, establish criteria, research and gather information, activate prior knowledge, generate additional ideas and questions, organize, analyze, and integrate all the information. (Olson, 1997)
- **Students feel connected:** Content that contributes to the student feeling connected may include advisory programs, cooperative learning, peer mentoring, peer counseling, and community service. Regardless of whether or not students participate in these programs, they need a sense of trust, respect, caring, concern, and community with others. In student/teacher interactions even a single event can determine how the student feels about a class and how he or she will perform. (Olson, 1997) One way to build connection is to send a welcoming e-mail before the first day of school. This has been shown to enhance student motivation, attitude toward the instructor, and perceptions of the course. Whether it is an e-mail or another computer contact such as instant messaging or social networking, the contact is relatively effortless and seems to improve student attitudes toward the instructor and the course. (Legg and Wilson, 2009)
- **Novelty:** Novel content can introduce a surprising or unusual experience creating a discrepancy in the student's mind, and this can cause a short-term arousal of interest in order to resolve the discrepancy. Some ways to increase novelty might include using discrepant events and demonstrations, amazing facts, fantasy, or games. (Palmer, 2007)
- **Timely and relevant to real life:** Making the content relevant to real life can increase a student's motivation. As such, teachers should emphasize the links between real life and school subjects, design assignments, and experiments that use everyday

- materials and situations, and use personal anecdotes. (Palmer, 2007) Tasks that are meaningful to the students' real life motivate them. (Frey and Fisher, 2010)
- **Variety:** Variety is very relevant to student motivation. Variety can be brought into the class by including activities wherein the students are physically active with a thinking component. Other forms of variety can be added into the content via dramatizations, model making, and out-of-classroom activities. (Palmer, 2007)
 - **Technology and information from the Internet such as Facebook, Twitter, YouTube, and phone apps:** Students love the Internet, so give them examples, videos, or demonstrations of topics from Internet sites that are interesting to them. At the very least, this incorporation of technology, the Internet, and phone apps involves using more of the students' language and experience base. Also, the Internet is a great way to keep up-to-date and to show important current trends and ideas. However, students need to understand how to assess the validity and safety of Internet sites and information. Whiteboards also can be powerful, interactive technological tools for improving instruction, but instructors need to know how to use them effectively. (Manzo, 2010)

INGREDIENT 4: METHOD/PROCESS

“If you tell me I will listen. If you show me I will see. If you let me experience, I will learn.” - Lao-Tzu

The method or process is the way in which content is presented, that is, the approach used for instruction. Two basic approaches for supporting and cultivating motivation in the classroom are (1) creating a classroom structure and institutional method that provides the environment for optimal motivation, engagement, and learning; and (2) helping the student to develop tools that will enable him or her to be self-regulated. (Alderman, 1999) Some specific ideas or tips for improving Ingredient 4 or the method/process contributions to student motivation are:

- **Incentives:** Educators could experiment with monetary incentives but budgets usually do not allow this possibility. Another option is to help the student get a scholarship/job/work study or participate in a sponsored competition featuring financial awards. Small incentive gifts could be given but these may not be as effective as money. Another option is to emphasize and illustrate the financial betterment that will occur for the student once he or she has completed his or her education. Or, the educator could use the incentive of time, that is, give the student the time to do something the student feels is important to him or her. In general, rewards and punishments work at controlling the students' immediate classroom behavior, but they do not foster an intrinsic, long-term desire or commitment to learning. (Daniels, 2010; Campbell and Niles, 2006)
- **Experiential learning or self-learning:** At the upper end of the hierarchy, experiential learning or self-learning becomes more highly utilized. Experiential learning is when an individual is actively involved with concrete experience, that is, a student cognitively, affectively, and behaviorally processes knowledge, skills, and/or attitudes such that knowledge is created through the transformation of experience. Smith and

Kolb (1986) explained individual experiential learning differences in terms of four learning styles or ways in which the mind works:

1. Convergent learning style (abstract conceptualization, active experimentation, may have solutions to the wrong problems, and excellence at technical tasks)
2. Divergent learning style (concrete experience, reflective observation, may be paralyzed by alternatives generated, and people oriented)
3. Reflective or assimilator learning style (loves ideas and concepts, theoretical professions, theory but no application, and ideas over people)
4. Doer or accommodator learning style (concrete experience and active experimentation, carries out plans, likes changing the environment, may produce tremendous ends but all in the wrong area, and prefers trial and error method).

Learning styles are combinations of heredity, education, experience, and the demands of the environment. In addition, learning styles are strongly correlated to work preferences. (Saunders, 1997) Learning styles are just different, one is not better than another. (Komarraju and Karan, 2008)

- Mutual goals or objectives: Students need to see the point of it all and know what they personally will get out of the educational process. For management-by-objectives (MBO) and goal theory to be successful, the participants must agree on mutual goals or objectives. Some of the common goals or objectives in the educational organization which promote continuous improvement and learning might be sense of pride, teamwork, willingness to share the credit, sense of ownership, the elimination of mixed messages, the management of interdependencies, shared vision and communication direction, the building of consensus, mutual respect and trust, and concern for the whole organization. It would be very beneficial for the educator to try to include these as appropriate in the MBO process. In turn, the goal setting needs to be tied to performance evaluation and rewards. Rewards unique to the educational environment could include the valuing of ideas, attention and support from the educator or educational organization, respect for beginning ideas, celebration and awards for accomplishments, the implementation of suggestions, and encouragement. (Ahmed, Loh, and Zairi, 1999; MacGrath, 2005)
- Verbal conformity: One method to use to support students in accomplishing their goals is verbal conformity wherein the student repeats all or part of the goal in his or her own words. This simple act of saying will influence his or her private convictions, i.e., saying is believing. Some methods that can be used to achieve verbal conformity include: (a) have the student explain the goal to a third party, (b) have the student write a memo on the subject, and (c) grapple for words and have the student fill in for you. The student needs to understand the goal first before using verbal conformity. (Pollock, 1999)
- Flexible and stimulating just-in-time training and interactivity: One way to support students in seeking out responsibility and working toward goals to which they are committed is to use flexible and stimulating just-in-time training which allows the student to train at his or her own pace and time. The key to effective use of this training is interactivity. That is, it is important to focus on the material to be learned and on how the students interact with it rather than being side tracked by glitz. Guide the students logically through the information and monitor their progress adjusting as

- necessary. (Burns, 1997) As expected, the natural use of technology and the Internet is essential here for building interactivity and just-in-time learning.
- Different types of framing: Educators need to be aware that different types of framing of a problem or decision area can lead to different preferences or shifts in judgment. In particular, students who have a more enjoyable experience during training are more likely to perceive the system to be easier to use which in turn can lead to enhanced behavioral intentions to use the system. Also, game-based training perceived as enjoyable will potentially allow users to scale initial hurdles to acceptance and usage, create higher-level intrinsic motivation, and lead to sustained usage behavior. (Venkatesh, 1999)
 - Objective criteria: Objective criteria should be clearly communicated and employed in testing and evaluating student success. The clarity of knowing exactly what is needed can be very motivating. Some of the motivational factors may include rewarding students for their success, appreciating them both verbally and in writing, providing them with opportunities to improve themselves and use their creativity, and allowing them to participate in the decision-making process and to assume responsibility. (Celikoz, 2010)
 - Encouragement and praise: Positive verbal statements of encouragement and praise can strongly influence student motivation. Praise for effort and for improvement can build a student's self-confidence. Esteem can be boosted by emphasizing his or her performance relative to personal goals. (Palmer, 2007) It is important that the student feel seen and "gotten."
 - Casework: Cases seem to be an effective method for increasing student motivation. In particular, Finney and Pyke (2008) have found that a positive correlation exists between case content relevance and student motivation toward local cases. In specific, case relevance can be based on relevance of the topic, importance of the topic, application to career interests, and integration of the subcomponents of the topic, e.g., business functional areas. Students did feel that local cases provided a more realistic learning experience and helped them learn about entrepreneurship. As such, case relevancy enhances learning and student motivation.
 - Guided discussion: Discussion seems to be a viable strategy for motivating students. Through guided discussion, students can demonstrate reading comprehension with integration of multiple and different texts and critical thinking using analysis and synthesis of information. That is, students are able to discuss and make connections between the textual knowledge, news or current events, and their personal experiences that motivate their thinking. (Newstreet, 2008)
 - Reinforcement strategies: Two reinforcement strategies have been found to lead to significantly higher test scores: reviewing the concepts delineated on the study guide and silent reading of class notes. Both of these strategies could be used to increase student motivation. (Carrell and Mengel, 1997)
 - Positive social interactions: When students have positive social interactions with their peers or teacher, they will become more engaged in learning. Social interaction can occur when students work in groups, have group discussions, group projects, and group presentations. However, the students need to be properly prepared in the skills

- needed to make the group operate effectively. (Palmer, 2007) Positive interaction with the instructor and in the classroom overall are important.
- **Storytelling:** A good story is a good story, and storytelling has always had a place in teaching. Storytelling can change the pace of a class, add a freshness to engage students, motivate students in their discipline, give the students the mental space to construct their own meanings, provide analogies between a story and a discipline, help understand the world, can generate reflection, and create common meanings and understandings. The instructor or the student can tell factual and/or fictitious stories. When students tell stories, they take ownership of their learning and become an integral part of the learning process. Students will self-motivate if an activity such as storytelling is sufficiently challenging and relevant. Any discipline can use stories, and stories can be used from other disciplines as appropriate. (Miley, 2009)
 - **Enhanced lecture:** While the lecture method is an academic staple, students do not pay attention continuously during a 50-minute lecture. Teachers need to be aware of attention cycles and strive to improve student attention by using student-centered enhanced lecture techniques. (Bunce, Flens, and Neiles, 2010). That is, lectures can be enhanced to make the class stimulating, entertaining, and interactive. For example, lectures can start with a “grabber” such as a chart, short reading, problem, cartoon, quote, question, vote, or dramatization. Interactivity is important in lectures and can take many forms: pop quizzes, questioning and discussion, problems, visual aids, films, questions on the board, questions through e-mail, handouts, simulations (Gillentine and Schultz, 2001), board games (Mummalaneni and Sivakumar, 2008), video games, and case methodology. The textbook can be used as a supplement to any lecture, however, the lecture does not need to be passive. Instructors need to represent the latest thinking and research, modeling how scholars frame questions and pursue answers. Humor, not sarcasm or ridicule, can be used in lectures. Positive physiological and psychological benefits result from humor such as attentiveness, interest, positive rapport, and retention of material. It is good to humanize lectures integrating biographies, history, current events, the Internet, and real life. Lectures need to respect the audience by utilizing students’ multiple intelligences (Gardner, 1990) and learning styles (Dunn and Dunn, 1978), e.g., visual, auditory, or tactile/kinesthetic learners. In addition, interdisciplinary lectures can enhance the investigation and understanding of topics. Overall, lectures need to motivate, challenge, and inspire. As a final tool, summarize the current lecture and preview the next lecture. (Heitzmann, 2010)
 - **Collaborative quiz:** The collaborative quiz uses the same questions as a regular quiz and helps to ensure that students have read the material carefully; but, it also provides an opportunity for students to engage in classroom experience. As such, students work collaboratively determining answers and crafting explanations together. The instructor will need to monitor the process to reduce free riders and dominant students as well as to maintain the fairness of the grading. (Quinn and Echerson, 2010)

INGREDIENT 5: ENVIRONMENT

“To stay motivated you must fight self-doubt, poor discipline, fear, and any other ghost” - Dr. Zonnya

Environment is the fifth key ingredient of student motivation. First of all, an environment must be available and accessible. Thereafter, that environment must be of a quality or caliber that contributes to the motivation of the students. For example, if an environment is not safe, it is difficult and maybe even unwise to put all of your attention on learning. On the other hand, an environment of openness and freedom to learn from our mistakes can foster motivation to learn. Also, the environment can be physical as well as mental, emotional, and even spiritual in some regard. Suggestions for creating an environment conducive to student motivation are as follow:

- Create an effective environment: According to Rumsey (1998), when creating an effective environment, educators need to consider the following:
 - Overall approach to material presentation and development,
 - Examples coming before and after detailed discussions of the concepts,
 - The use of engaging classroom activities,
 - In-depth discussions or simulations,
 - The use of good business or organizational problems rather than contrived examples,
 - The use of real-life exercises throughout that are varied in scope and field of application,
 - Using applications relevant to students’ everyday experiences or to their chosen career fields,
 - Creating situations in which the students perceive themselves as academically productive,
 - Fostering positive peer social interaction and exchange,
 - Decreasing peer aggression,
 - Moving from simple to more complex problems,
 - The use of a good solidly written text in a traditional format,
 - Incorporation of some modern or future components that concern students,
 - Motivating by example and by encouraging student discovery,
 - Developing positive attitudes,
 - Making sure that academic tutoring is available,
 - Having voluntary parental and community support and involvement as necessary, and
 - Encouraging critical thinking (e.g., what do you mean, why, what if, what works/does not work, and how would you...).
- Individual and learning system design differences: According to Lengnick-Hall and Sanders (1997), both individual and learning system design differences influence the learning environment. For example, to motivate students to demonstrate high levels of responsibility and self-management, effective goal setting must occur in that students have a clear understanding of course objectives, means and methods for accomplishing target objectives, and measured benchmarks for assessing their

progress. Students need not participate in establishing the goals as long as they accept the goals as feasible and desirable. When students take charge of their learning, they gain self-esteem and confidence, more choices, higher levels of commitment, and the ability to customize the learning process to best meet their personal needs and learning goals. That is, when students become active participants in customizing and activating learning systems, they become team leaders, coaches, and models in a sense. “Through self-management and self-leadership, students invest their efforts more effectively and efficiently, take ownership of their educational experience, and customize the learning process to reflect their personal interests and competencies.” (Lengnick-Hall and Sanders, 1997, p. 7) It is assumed that this shift to increased self-participation, personalized learning, and self-ownership would be viewed positively by teachers and other shareholders involved in the educational process. (Andersen, 2011; Stewart, et al., 2005)

- Include the study of self-information: Just like people everywhere, students are intrinsically interested in the study of information about themselves and about their own personal interests. Instructors need to find creative ways of knowing and incorporating self-information into the classroom. (Dargahi-Noubary, 1998)
- Empowerment: Empowerment can contribute positively to the learning environment. Empowerment can mean vested authority or enablement. Before investing authority in a role or person, it is necessary to clarify the student’s mandate and the expectations of his or her performance. Enablement means having the right tools and support when they are needed. (Maccoby, 1999)
- Engagement and considering student and teacher opinions: The learning environment should take into consideration the intrinsic and extrinsic student motivations and the opinions of students and teachers in arranging the environment. Materials, tools, and equipment that are needed in the educational process should be determined, obtained, and modernized so that active learning is promoted. This engagement results in students feeling that their teachers have a special interest in them. Students need to be encouraged to engage and to participate. (Celikoz, 2010; Daniels, 2010; Adkins-Coleman, 2010)
- Teamwork: An environment of teamwork can contribute to learning. All teams need four competencies: generate and refine ideas, organize and integrate work, sustain group spirit, and manage boundaries. “Smart teams” are built by having the entire team look at what competencies are needed to be effective. For example, generational and multicultural differences will need to be considered as well as chain of command, work/life balance, and technology. (Farrer and Maurer, 1999) In terms of multicultural diversity in groups, the following should be considered: (1) the reasons for taking the course may be different than that perceived by the instructor or other team members, (2) students may have difficulty in studying or completing assignments due to part time jobs or attending other courses, (3) the instructor should not underestimate how differently people think and feel from various cultures, and (4) value judgments of purpose and moral standards of behavior may be important differences. (Sexty, 1998; Simmons and Page, 2010; Lilly and Tippins, 2002; Hytti, et al., 2010; Friedman, Cox, and Maher, 2010)

- Structures: Teachers, administrators, and counselors contribute to a positive teaching and learning environment by putting in place structures that provide an optimal learning environment for learners. These educational leaders can enhance the development of an educational experience that encourages students to express their own ideas, freely participate in discussions, freely compare and contrast ideas, be involved in discussion, and be able to learn from each other. These structures can lead to increased student-faculty interaction, elevated student-to-student relations, and the development of critical thinking skills that in turn affect student motivation and academic success. (Rugutt and Chemosit, 2009; Louis and Wahlstrom, 2011)
Structural characteristics also may include type of tasks, degree of student autonomy, and evaluation (Debnath, Tandon, and Pointer, 2007)
- Distance and online learning: Instructors are moving increasingly to distance and online learning environments. Motivating students online can be difficult given content, technology access and challenges, isolation, poor communication with instructors, English as a second language, and lack of connection between content and the students' needs. In addition, instructors may not be able to show the depth of their knowledge online, and empathy and enthusiasm may be lost in the online environment. On the other hand, assignments can be challenging and have the variety necessary to increase curiosity and creativity. Active and multifaceted projects may be developed that have personal meaning to the students. Distance and online communication should be clear, timely, friendly, and flexible. In the online environment, the acquisition of mastery and improvement could be the primary focus rather than the more traditional focus on test taking and evaluation. Social isolation and depersonalization can be reduced by building a sense of online community. Very importantly, teachers and students should have consistent contact with technical support personnel. Distance and online learning may be as effective as traditional learning in terms of student motivation, attitudes, and achievement. Intrinsic motivation is an important indicator for online students, with many online learners having higher intrinsic motivation. However, ultimately, the optimal learning model might be a hybrid of conventional and online learning. (Beffa-Negrine, Cohen, and Miller, 2002; Zhu, Valcke, and Schellens, 2009; Crank, Ristau, and Rogers, 1999; PR Newswire, 2010)
- Emotionally literate environment: The more comfortable individuals feel in themselves and with others, the easier it is to concentrate and achieve. Consequently, emotional literacy has a positive impact on achievement, mental health issues, behavior, and workplace effectiveness. Creating an emotionally literate environment includes equipping students with essential life skills and learning behaviors including self-awareness, empathy, managing feelings, motivation, and social skills. These skills can be taught and modeled. In building an emotionally literate environment, the place for the teacher to start is with him or herself. That is, each instructor should get his or her thinking straight, stand firm, refine communication skills to relate positively and creatively with the students, develop positive regard toward self and others, and develop a support network for oneself and a supportive lifestyle. Also, it is important to constantly review and improve these efforts. As such, teaching should focus not only on pedagogical techniques, but also on the social and emotional dynamics of the

student-teacher relationship. Here is a YouTube link that demonstrates an emotionally literate environment: <http://www.youtube.com/watch?v=armP8TfS9Is>. (MacGrath, 2005; Lammers and Smith, 2008; Wighting, Liu, and Rovai, 2008)

SUMMARY

What is the best way to motivate students? The short answer is that all of these strategies can be used, as often as possible. Understanding student motivation is much like a group of blind men discovering for the first time what an elephant is like. One man holds the tail and says that an elephant is like a broom. Another holds a leg and says that an elephant is like a tree trunk. Others say an elephant is like a big pillow, a big hose, or a spear. Each blind man has an accurate portrayal from his specific vantage point but not the whole picture. This also seems to be the case regarding student motivation. Each of the writers or theorists has another valuable aspect that contributes to the understanding of student motivation. However, no theory seems to be complete in and of itself. As such, maybe the best way to gain some new understandings about motivation is to hold all of these theories simultaneously in mind, much like a giant puzzle, and see where there is good understanding and where there are gaps. These new ideas then could be translated into the classroom, using those specific items that are effective and useful in each instructor's unique classroom situation. At the very least, it seems that motivation in the classroom is a function of five components: student, teacher, content, method/process, and environment. Aspects of any of these components could contribute to and/or hinder motivation. Maybe educators could start just by choosing and trying three new possibilities for enriching student motivation. Or, more importantly, educators could watch themselves and their own behavior to become self-aware of new understandings about motivation. Remember... "motivation is when dreams put on work clothes." (Robinson in Friedman, 1999, p. 2)

REFERENCES

- Adkins-Coleman, T. A. (2010). "I'm Not Afraid to Come into Your World": Case Studies of Teachers Facilitating Engagement in Urban High School English Classrooms. *The Journal of Negro Education*, 79(1), 41-53.
- Afzal, H., Ali, I., Khan, M. A., and Hamid, K. (2010). A Study of University Students' Motivation and Its Relationship with Their Academic Performance. *International Journal of Business and Management*, 5(4), 80-89.
- Ahmed, P., Loh, A., and Zairi, M. (1999). Cultures for Continuous Improvement and Learning. *Total Quality Management*, 10(4/5), S426-S434.
- Alderman, M. K. (1999). *Motivation for Achievement: Possibilities for Teaching and Learning*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc. Publishers.
- Andersen, M. H. (2011). The World Is My School: Welcome to the Era of Personalized Learning. *The Futurist*, 45(1), 12-17.
- Anonymous (2010). New Study Reveals Strong Correlation between Students' Motivation to Study with iPhone App and Better Course Grades; Continuing Partnership between 'GetYa Learn On' and Abilene Christian University Demonstrates Successful Integration into Classroom Curriculum. *PR Newswire*, New York, September 1.

- Beffa-Negrini, P. A., Cohen, N. L., and Miller, B. (2002). Strategies to Motivate Students in Online Learning Environments. *Journal of Nutrition Education and Behavior*, 34(6), 334-340.
- Bunce, D. M., Flens, E. A., and Neiles, K. Y. (2010). How Long Can Students Pay Attention in Class? A Study of Student Attention Decline Using Clickers. *Journal of Chemical Education*, 87(12), 1438-1443.
- Burns, T. (1997). Multimedia Training. *Journal of Quality & Participation*, 20(3), 22-26.
- Bye, D., Pushkar, D., and Conway, M. (2007). Motivation, Interest, and Positive Affect in Traditional and Nontraditional Undergraduate Students. *Adult Education Quarterly*, 57(2), 141-158.
- Campbell, S. V. and Niles, M. S. (2006). The Effect of Monetary Incentives on Accounting Student Motivation. *Academy of Educational Leadership Journal*, 10(1), 69-83.
- Carrell, L. and Menzel, K. (1997). The Impact of Preparation and Motivation on Learning Performance. *Communication Education*, 46(4), 262-272.
- Celikoz, N. (2010). Basic Factors that Affect General Academic Motivation Levels of Candidate Preschool Teachers. *Education*, 131(1), 113-127.
- Crank, F., Ristau, R. A. and Rogers, H. D. (1999). Utilization of the Internet in Teaching Business Courses. Allied Academies International Conference, *Academy of Educational Leadership Proceedings*, 4(1), 14-21.
- Daniels, E. (2010). Creating Motivating Learning Environment: What We Can Learn from Researchers and Students. *English Journal*, 100(1), 25-29.
- Dargahi-Noubary, G. and Growney, J. (1998). Risk-A Motivating Theme for an Introductory Statistics Course. *The American Statistician*, 52(1), 44-48.
- Darling-Hammond, L. (1998). Unequal Opportunity: Race and Education. *Brookings Review*, 16(2), 28-32.
- Dean, R. J. and Dagostino, L. (2007). Motivational Factors Affecting Advanced Literacy Learning of Community College Students. *Community College Journal of Research and Practice*, 31, 149-161.
- Debnath, S. C. (2005). College Student Motivation: An Interdisciplinary Approach to an Integrated Learning Systems Model. *Journal of Behavioral and Applied Management*, 6(3), 168-189.
- Debnath, S. C., Tandon, S. and Pointer, L. V. (2007). Designing Business School Courses to Promote Student Motivation: An Application of the Job Characteristics Model. *Journal of Management Education*, 31(6), 812-832.
- Dedmond, R. M. (2009). Long-Range Planning Motivates Students and Personalizes. *Techniques: Connecting Education and Careers*, 84(3), 20-22.
- Docan-Morgan, T. and Manusov, V. (2009). Relational Turning Point Events and Their Outcomes in College Teacher-Student Relationships from Students' Perspectives. *Communication Education*, 58(2), 155-188.
- Doran, J. (1999). Helping Students to Succeed. *Pennsylvania CPA Journal*, 69(4), 43+.
- D'Souza, K. A. and Maheshwari, S. K. (2010). Factors Influencing Student Performance in the Introductory Management Science Course. *Academy of Educational Leadership Journal*, 14(3), 99-120.
- DuBrin, A. (2008). *Essentials of Management*, 8/E, South-Western.

- Duffy, J. and Ketchard, A. (1998). Examining the Role of Service Quality in Overall Service Satisfaction. *Journal of Managerial Issues*, 10(2), 240-255.
- Dunn, R. and Dunn, K. (1978). *Teaching Students through Their Individual Learning Styles: A Practical Approach*. Reston, VA: Reston Publishing Company.
- Farrer, C. and Maurer, R. (1999). Smart Teams. *Executive Excellence*, 16(7), 14+.
- Finegan, T. and Siegfried, J. (1998). Do Introductory Economics Students Learn More If Their Instructor Has a Ph.D.? *American Economist*, 42(2), 34-46.
- Finney, S. and Pyke, J. (2008). Content Relevance in Case-Study Teaching: The Alumni Connection and Its Effect on Student Motivation. *Journal of Education for Business*, 83(5), 251-258.
- Frey, N. and Fisher, D. (2010). Motivation Requires a Meaningful Task. *English Journal*, 100(1), 30-36.
- Friedman, B. A., Cox, P. L., and Maher, L. (2010). Best Practices for the Implementation of Goal Setting and Peer Assessment: Curriculum and Research Design. *The Journal of Applied Business and Economics*, 10(4), 34-47.
- Friedman, S. (1999). The Importance of Maintaining Your Motivation. *Financial Services Advisor*, 142(4), 4-7.
- Fulton, E. and Turner, L. A. (2008). Students' Academic Motivation: Relations with Parental Warmth, Autonomy Granting, and Supervision. *Educational Psychology*, 28(5), 521-534.
- Gardner, H. (1990). A School for All Intelligences. *Educational Leadership*, 47(7), 33-37.
- Garger, J., Thomas, M. and Jacques, P. H. (2010). Early Antecedents to Students' Expected Performance. *International Journal of Educational Management*, 24(2), 129-138.
- Gillentine, A. and Schulz, J. (2001). Marketing the Fantasy Football League: Utilization of Simulation to Enhance Sport Marketing Concepts. *Journal of Marketing Education*, 23(3), 178-187.
- Heitzmann, R. (2010). 10 Suggestions for Enhancing Lecturing. *Education Digest*, 75(9), 50-54.
- Helmlinger, W. (1997). Motivation. Retrieved on December 15 from <http://www.cratus.com/resources/willAug97.html>.
- Higher Education Research Institute (2003). *The Official Press Release for the American Freshmen 2002*. Los Angeles: University of California.
- Hytti, U., Stenholm, P. and Heinonen, J. (2010). Perceived Learning Outcomes in Entrepreneurship Education. *Education + Training*, 52(8/9), 587-606.
- Katz, I. and Assor, A. (2007). When Choice Motivates and When It Does Not. *Educational Psychology Review*, 19(4), 429-442.
- Komaraju, M. and Karau, S. J. (2008). Relationships between the Perceived Value of Instructional Techniques and Academic Motivation. *Journal of Instructional Psychology*, 35(1), 70-82.
- Lammers, W. J. and Smith, S. M. (2008). Learning Factors in the University Classroom: Faculty and Student Perspectives. *Teaching of Psychology*, 35(2), 61-70.
- Legg, A. M. and Wilson, J. H. (2009). E-Mail from Professor Enhances Student Motivation and Attitudes. *Teaching of Psychology*, 36(3), 205-211.
- Lei, S. A. (2010). Intrinsic and Extrinsic Motivation: Evaluating Benefits and Drawbacks from College Instructors' Perspectives. *Journal of Instructional Psychology*, 37(2), 153-160.
- Lengnick-Hall, C. and Sanders, M. (1997). Designing Effective Learning Systems for Management Education. *Academy of Management Journal*, 40(6), 1334-1368.

- Lilly, B. and Tippins, M. J. (2002). Enhancing Student Motivation in Marketing Classes: Using Student Management Groups. *Journal of Marketing Education*, 24(3), 253-265.
- Louis, K. S. and Wahlstrom, K. (2011). Principals as Cultural Leaders. *Phi Delta Kappan*, 92(5), 52-56.
- Maccoby, M. (1999). Re-thinking Empowerment. *Research Technology Management*, 42(5), 56-57.
- MacGrath, M. (2005). Beyond Behaviour Management: Manage or Motivate? *Education Review*, 19(1), 57-64.
- Manzo, K. K. (2010). Beyond Teacher Chalk Talk. *Digital Directions*, Winter, 34-37.
- Maslow, A. (1943). A Theory of Human Motivation. *Psychological Review*, 50, 370-396.
- McGlynn, A. P. (2008). Millennials in College: How Do We Motivate Them? *Education Digest*, 73(6), 19-22.
- Merriam-Webster (1997). *Merriam-Webster's Dictionary*, Houghton-Mifflin.
- Miley, F. (2009). The Storytelling Project: Innovating to Engage Students in their Learning. *Higher Education Research & Development*, 28(4), 357-369.
- Montalvo, G. P. (1998). Pleasing the Teacher. *Dissertation Abstracts International Section A: Humanities & Social Sciences*, 58(8-A), February, 3002.
- Moore, S., Armstrong, C. and Pearson, J. (2008). Lecture Absenteeism among Students in Higher Education: A Valuable Route to Understanding Student Motivation. *Journal of Higher Education Policy and Management*, 30(1), 15-24.
- Mummalaneni, V. and Sivakumar, S. (2008). Effectiveness of a Board Game in Fostering a Customer Relationship Orientation among Business Students. *Journal of Relationship Marketing*, 7(3), 257.
- Newstreet, C. (2008). Paul Revere Rides through High School Government Class: Teacher Research and the Power of Discussion to Motivate Thinking. *The Social Studies*, January/February, 9-12.
- Nonis, S. A. and Hudson, G. I. (2010). Performance of College Students: Impact of Study Time and Study Habits. *Journal of Education for Business*, 85, 229-238.
- Olson, G. (1997). Motivation, Motivation, Motivation - Secondary School Educators. Retrieved from [sysiwyg://934/http://7-12educators.about...-12educators/library/weekly/aa071897.htm](http://934/http://7-12educators.about...-12educators/library/weekly/aa071897.htm).
- Palmer, D. (2007). What Is the Best Way to Motivate Students in Science? *Teaching Science-The Journal of the Australian Science Teachers Association*, 53(1), 38-42.
- Pollock, T. (1999). A Personal File of Stimulating Ideas, Little Known Facts and Daily Problem Solvers. *Supervision*, 60(9), 18-20.
- Quinn, T. and Eckerson, T. (2010). Motivating Students to Read with Collaborative Reading Quizzes. *English Journal*, 100(1), 89-91.
- Richardson, M. and Abraham, C. (2009). Conscientiousness and Achievement Motivation Predict Performance. *European Journal of Personality*, 23, 589-605.
- Rugutt, J. and Chemosit, C. C. (2009). What Motivates Students to Learn? Contribution of Student-to-Student Relations, Student-Faculty Interaction and Critical Thinking Skills. *Educational Research Quarterly*, 32(3), 16-28.
- Rumsey, D. (1998). Business Statistics: Decision Making with Data. *The American Statistician*, 52(1), 85-86.

- Saunders, P. (1997). Experiential Learning, Cases, and Simulations in Business Communications. *Business Communications Quarterly*, 60(1), 97-114.
- Senge, P., Kleiner, A., Roberts, C., Ross, R., and Smith, B. (1994). *The Fifth Discipline Fieldbook: Strategies and Tools for Building a Learning Organization*, NY: Doubleday Currency.
- Sexty, R. (1998). Teaching Business Ethics in Transitional Economies: Avoiding Ethical Missionary. *Journal of Business Ethics*, 17(2), 1311-1317.
- Shulman, L.S. (1987). Knowledge and Teaching: Foundations of New Reform. *Harvard Education Review*, 57(1), 1-21. Retrieved on April 8, 2011 from <http://people.ucsc.edu/~ktellez/shulman.pdf>.
- Simmons, A. M. and Page, Melissa (2010). Motivating Students through Power and Choice. *English Journal*, 100(1), 65-69.
- Smith, D. and Kolb, D. (1986). *User's Guide for the Learning Style Inventory*, Boston: McBer.
- Stewart, R., Hill, K., Steward, J., Bimler, D. and Kirkland, J. (2005). Why I Am a Psychology Major: An Empirical Analysis of Student Motivations. *Quality & Quantity*, 39, 687-709.
- Truby, D. (2010). What Really Motivates Kids. *Instructor*, 119(4), 26-29.
- Trugman, H. (2007). The Role of Tests in Students (De)Motivation. *Publications by BETA-IATEFL*, January 1
- Venkatesh, V. (1999). Creation of Favorable User Perceptions: Exploring the Role of Intrinsic Motivation. *MIS Quarterly*, 23(2), 239-260.
- Weinstein, L. (2010). What Motivates College Students to Learn? *College Student Journal*, 44(2), 472-474.
- Whistler, J. (1992). The Impact of Teacher Relationship and Interactions on Self-Development and Motivation. *Journal of Experimental Education*, 60(1), 15-30.
- Whiting M. J., Liu, J., and Rovai, A. P. (2008). Distinguishing Sense of Community and Motivation Characteristics between Online and Traditional College Students. *The Quarterly Review of Distance Education*, 9(3), 285-295.
- Zhu, C., Valcke, M. and Schellens, T. (2009). A Cross-Cultural Study of Online Collaborative Learning. *Multicultural Education & Technology Journal*, 3(1), 33.

Table 1
Five Key Ingredients for Improving Student Motivation

| Student | Teacher | Content | Method/Process | Environment |
|---|---|---|--|---|
| <ul style="list-style-type: none"> • Intrinsic and extrinsic motivation • Various individual and social factors • Hierarchy of needs • Perceived well-being • Efficient use of energy and focus • Purposeful connection with work • Conscientiousness and achievement • Public speaking competence • Study time and study habits • Lecture attendance • Comprehensive, long-range educational plan | <ul style="list-style-type: none"> • Subject knowledge and motivational level • Teacher skills • Teacher qualifications • Test giving • Scientific management and human relations • Conscious of small details • Reach out to students • Know your students and build on their strengths • Value and build relationship • Relational turning points • Enthusiasm | <ul style="list-style-type: none"> • Students experience success and achievement • Student ownership • Student choices • Build competency • Creativity and critical thinking • Students feel connected • Novelty • Timely and relevant to real life • Variety • Technology and information from the Internet such as websites, Facebook, Twitter, YouTube, and phone apps | <ul style="list-style-type: none"> • Incentives • Experiential learning or self-learning • Mutual goals or objectives • Verbal conformity • Flexible and stimulating just-in-time training and interactivity • Different types of framing • Objective criteria • Encouragement and praise • Casework • Guided discussion • Reinforcement strategies • Positive social interactions • Storytelling • Enhanced lecture • Collaborative quiz | <ul style="list-style-type: none"> • Create an effective environment • Individual and learning system design differences • Include the study of self-information • Empowerment • Engagement and considering student and teacher opinions • Teamwork • Structures • Distance and online learning • Emotionally literate environment |